Epidemiology

USSR

UDC 616.981.455-084.44

DAVIDOVICH, V. F., Saratov Pedagogic Institute, Saratov

"Role of the Principal Factors of the Environment in the Eradication of Tularemia Today"

Moscow, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 8, Aug 73, pp 9-15

Abstract: A study based on observations carried out in 1946-1970 and recorded data for 1931-1946 made it possible to evaluate the importance of various factors that were effective in the eradication of tularemia in Saratovskaya Oblast'. Measures for the eradication of tularemia in Saratovskaya Oblast' and in the USSR as a whole proceeded along two lines: the operational comprising immunization, sanitary-hygienic measures, etc. and the general involving a radical interference of man in conditions that are responsible for the existence of natural foci of tularemia. General measures that contribute to the eradication of foci of tularemia and have been carried out in Saratovskaya Oblast' as well as other parts of the central RSFSR include cultivation of virgin lands, hydroelectric construction, construction of dams on small rivers, and clearing of wooded lands. Development of agriculture in Saratovskaya Oblast' contributed to the elimination of 1/2

DAVIDOVICH, V. F., Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, No 8, Aug 73, pp 9-15

rodents and ticks. Hydroelectric construction that was carried out there flooded marshy lands and eliminated foci of the marsh-swamp type. However, this construction has also resulted in the partial flooding of new areas with the formation of marshes and may thus lead to the development of new foci of infection there. Steppe foci of tularemia, which are more active than those of the mendow-field type, must also be considered. Microfoci of the steppe type still exist in the Engel'skiy Krasnokutskskiy, and Novouzenskiy rayons of Saratovskaya Oblast'. Eradication of tularemia and prevention of its recurrence can be brought about most effectively by applying general measures that eliminate rodents and ixodid

2/2

- 19 -

UDC 616.981.455-022.395.421(470.44)

DAVIDOVICH, V. F., Saratovskaya Oblast Sanitary Epidemiological Station

"Ixodes Ticks in the Saratov Region and Their Role in Maintaining Tularemia Microfoci"

Moscow, Meditsinskaya Parazitologiya i Parazitarnyye Bolezni, Vol 40, No 4, jul/Aug 71, pp 470-475

Abstract: Eight species of Ixodes ticks inhabit the Saratov region: Dermacentor marginatus D. pictus, Rhipicephalus rossicus, Rh. schulzei, Ixodes ricinus, I. laguri, Hyalomma scupense and Haemaphysalis punctata. Of these, I. laguri is reported for the first time. The most numerous and widespread are the first three species — inhabitants of the steppes and meadows of Middle and Southern Europe. I. ricinus, which inhabitants only the forest-steppe zone is infrequently found. H. punctata was also extremely rare. The oblast contains the northern limits of the range of I. laguri and Rh. schulzei and the western limit for H. scupense. Tick sites are river gulches, ravines, forest perimeters and other locations containing many rodents, small mammals, and other hosts of nymphs, and larvae (and often ticks also). Thus, an uninterrupted cycle of tularemia bacteria is ensured. The first three

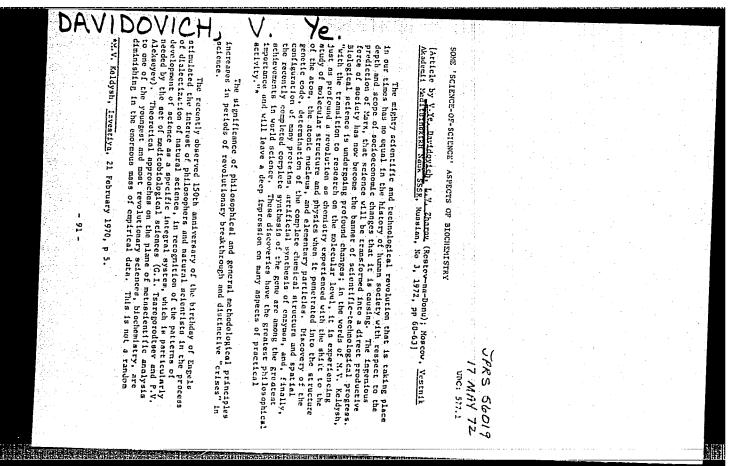
- 38 -

USSR

DAVIDOVICH, V. F., Meditsinskaya Parazitologiya i Parazitarnyye Bolezni, Vol 40, No 4, Jul/Aug 71, pp 470-475

species, when collected from plants and rodents, yielded tularemia hacteria frequently, and over a period of years. It is these three species that are crucial to the maintenance of tularemia foci.

2/2



UDC: 621.762:669.018.5(088.8)

DAVIDOVICH, Ya. G., GLUSKIN, A. Ya., TEMKIN, I. V., AVROROVA, G. V., PETROSYAN, L. S., KOZHEVNIKOV, V. I.

"Method of Manufacture of Metal-Graphite Brushes"

USSR Author's Certificate Number 353303, Filed 13/10/70, Published 24/10/72 (Translated from Referativnyy Zhurnal Metallurgiya, No 8, 1973, Abstract No 8G434P).

Translation: A method is suggested for the manufacture of metal-graphite brushes, for example copper-graphite brushes, by mixing of graphite and pitch in the solid state with the addition of Cu powder and subsequent pressing of the mixture. In order to improve the characteristics of the brushes, the Cu powder is mixed with the prepared mixture of graphite and pitch.

1/1

- 38 -

UNCLASSIFIED PROCESSING DATE--13NOV70
TITLE--MUSLEM MEASURES AND WEIGHTS WITH CONVERSION INTO THE METRIC SYSTEM,
CATA ON METROLOGY OF MEDIEVAL MIDDLE ASIA -UAUTHOR-(02)-KHINTS, V., DAVOOOVICH, YE.A.

CCUNTRY OF INFO-USSR

SOURCE-MUSUL MANSKIYE MERY I VESA S PEREVODOM V METRICHESKIYU SISTEMU.

MATERIALY (SL; 2139) PO METROLOGII SREDNEVEKOVOY SREDNEY AZII. MOSCOW.

DATE PUBLISHED----70

SUBJECT AREAS-MATHEMATICAL SCIENCES

TUPIC TAGS-MEASUREMENT, METROLOGY

CENTROL MARKING-NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1993/1995

STEP NO--UR/0000/70/000/000/0001/0146

CIRC ACCESSION NO--AMO114390

UNCLASSIFIED

005 UNCLASSIFIED PROCESSING DATE--13NOV70 CIRC ACCESSION NO--AMOL14390 ABSTRACT/EXTRACT--(U) GP-O- ABSTRACT. TABLE OF CONTENTS: KHINTS, V. MOSLEM MEASURES AND WEIGHTS WITH CONVERSION INTO THE METRIC SYSTEM PREFACE OF THE AUTHOR TO THE RUSSIAN EDITION, 9. PREFACE OF THE AUTHOR TO THE GERMAN EDITION, 10. I WEIGHT MEASURES, 11. (I VOLUME MEASURES, 45. III LENGTH MEASURES, 62. IV SURFACE MEASURES, 73. DAVIDOVICH, YE. A. DATA ON METROLOGY OF MEDIEVAL MIDDLE ASIA I WEIGHT AND VOLUME MEASURES, 79. II LENGTH MEASURES, 109. III SURFACE MEASURES, 122. BIBLIOGRAPHY AND ABBREVIATIONS, 132. ADDITIONAL LITERATURE, 141. ALPHABETICAL LIST OF MEASURES, 144. THE BOOK CONTAINS TWO CONTENT RELATED WORKS. THE FIRST WORK WRITTEN BY A WELL KNOWN GERMAN ORIENTALIST REPRESENTS A MANUAL ON ALL BASIC MEASURES WHICH EXISTED IN MOSLEM COUNTRIES (FROM MAROCCO TO INDIA) SINCE THE FIRST CENTURIES OF THE ISLAM. THE SECOND WORK WRITTEN BY YE. A. DAVIDOVICH REPRESENTS A SUPPLEMENT TO KHINT'S MANUAL; IT DEALS WITH METROLOGY OF MEDIEVAL HIDDLE ASIA.

2/2

1/2 013

TITLE--ACYLATION OF AMINES BY ORTHO ESTERS -U-

PROCESSING DATE--230CT70

AUTHOR-(03)-ROGOZHIN, S.V., DAVIDOVICH, YU.A., KORSHAK, V.V.

COUNTRY OF INFO--USSR

SOURCE--IZV. AKAD. NAUK SSSR, SER. KHIM. 1970, (3), 727

DATE PUBLISHED----70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES, CHEMISTRY

TOPIC TAGS--AMIDE, HYDROGEN CHLORIDE, AMINO ACID, ESTER, CHLOROETHANE, ETHANOL, IMIDE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1999/1886

STEP NO--UR/0062/70/000/003/0727/0727

CIRC ACCESSION NO--APO123674

UNCLASSIFIED

2/2 013 UNCLASSIFIED PROCESSING DATE-+230CT70 CIRC ACCESSION NO--AP0123674 ABSTRACT/EXTRACT--(U) GP-0-ABSTRACT. HEATING ORTHO ESTERS WITH AMINE HCL SALTS GIVES AMIDES OF THE CORRESPONDING CARBOXYLIC ACIDS, WITH THE ACYLATION REQUIRING PROPORTIONS OF REACTANTS SO AS TO YIELD 2 MOLES ALC. AND I MOLE ALKYL HALIDE. EVIDENTLY THE REACTION PROCEEDS THROUGH FORMATION OF IMIDO ESTER HCL SALTS, WHICH AT 80-110DEGREES ARE CLEAVED TO AMIDE AND ALKYL HALIDE. THIS METHOD IS OF INTEREST FOR PREPN. OF N ACYL DERIVS. OF AMINO ACID ESTERS DIRECTLY FROM AVAILABLE HOL SALTS. THUS HEATING 0.051 MOLE DL, LEUCINE ET ESTER, HCL WITH 0.054 MOLE MEC(DET) SUB3 I HR AT 75-90DEGREES GAVE 97PERCENT ETCL, 100PERCENT ETOH, AND 10.25 G CRUDE PRODUCT WHICH YIELDED SOPERCENT N. ACETYLLEUCINE ET ESTER. B SUB1 110-12DEGREES. SIMILARLY 0.0412 MOLE BUNH SUB2.HCL AND 0.0433 MOLE HC (OET) SUB3 HEATED 1.5 HR AT 110DEGREES GAVE 98PERCENT ETCL. 100PERCENT ETOH, AND 85PERCENT BUNCHO; B SUB1 77DEGREES. FACILITY: INST. ELEMENTOORG. SOEDIN., MOSCOW, USSR. UNCLASSIFIED

UDC 519.24

DAVIDOVICH, Yu. S.

"Asymptotic Behavior of Dispersions of Spatial Means of a Homogeneous Random

Teoriya Veroyatnostey i Mat. Statist. Mezhved. Nauch. Sb., [Theory of Probabilities and Mathematical Statistics. Indepartmental Scientific Collection], 1970, No 3, pp 35-49, (Translated from Referativnyy Zhurnal Kibernetika, No 5, 1971, Abstract No. 5V192 by the author).

Translation: Suppose $\xi(P)$ is a homogeneous random field with continuous (discrete) variable parameter PGEⁿ, where Eⁿ is an n-dimensional euclidean space, and suppose

 $S_T = \int_0^{T_1} \cdots \int_0^{T_n} \xi(x_1, \ldots, x_n) dx_1 \ldots$

 $\dots dx_n \left(S_N = \sum_{k_n=0}^{N_n-1} \xi(k_1, \dots, k_n) \right).$

KARPATONIO PARAMENTANIA DEPOSTUTANO

The asymptotic behavior of dispersions $\mathrm{DS}_T(\mathrm{DS}_N)$, is studied, when $\lim_{l\to 1,\dots,n} T_l\to \infty \binom{\min N_l\to \infty}{l-1,\dots,n}$ and the asymptotic formulas are found for $\mathrm{DS}_T(\mathrm{DS}_N)$. The application of the results produced in the selection of estimates of the mean value of a homogeneous random field $\xi(P)$ is studied.

1/1

UDC: 629.78.015:533.697:621.4

DAVIDSON, V. Ye., NESHCHERET, P. A., GLINKIN, B. A.

"Exhaust of an Underexpanded Supersonic Jet into a Cylindrical Pipe with

Gidroaeromekh. i Teoriya Uprugosti. Mezhvuz. Nauch. Sb. [Hydroaeromechanics and the Theory of Elasticity. Inter-University Scientific Collection], 1973, No 16, pp 38-41 (Translated from Referativnyy Zhurnal Raketostroyeniye, No 9, 1973, Abstract No 9.41.92)

Translation: Results are presented from experimental studies of the flow of an underexpanded stream from a conical nozzle at numbers $M_n=1.6-3.0$ with half-aperture angle $\alpha=15^\circ$. The flow occurs into a cylindrical pipe up to 10 calibers in length along its axis. The geometric structure of the wave picture is studied and curves of the distribution of pressure along the generatrix of the pipe are presented in the self-similar flow mode for ratios of diameters of nozzle and pipe d-0.1-1.0. Approximating dependences are produced for the pressure curves. 5 Figures; 1 Biblio Ref.

1/1

1/2 014 UNCLASSIFIED PROCESSING DATE--13M0V70
TIFLE--EXPERIMENTAL REDESIGN OF APPARATUS FOR THE ATMOSPHERIC DISTILLATION
OF PETROLEUM -UAUTHOR-(05)-FARAMAZOV, S.A., ALIYEV, A.A., AKHMEDOV, N.I., KOSENKOV, V.G.,
DAVIDYAN, L.K.
COUNTRY OF INFD--USSR

SOURCE--NEFTEPERERAB. NEFTEXHIM. (MUSCOW) 1970, (4), 10-12

DATE PUBLISHED ---- 70

SUBJECT AREAS--MATERIALS, MILITARY SCIENCES

TOPIC TAGS--PETROLEUM DISTILLATION, PETROLEUM REFINING EQUIPMENT, HEAT EXCHANGER

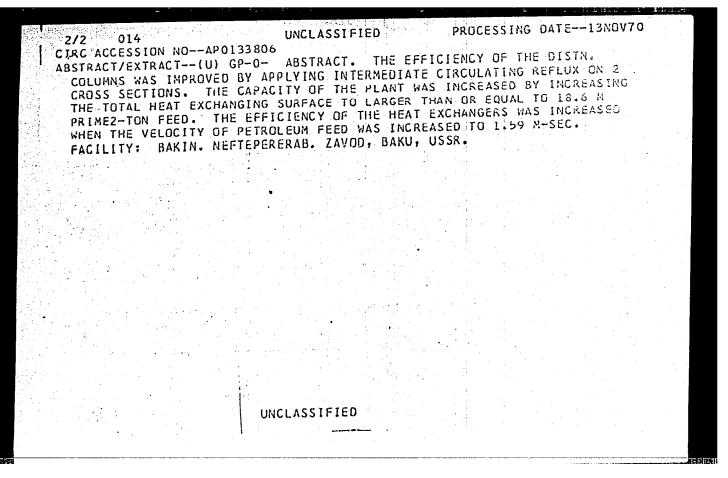
CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--3005/1962

STEP NO--UR/0318/70/000/004/0010/0012

CIRC ACCESSION NO--APO133806

UNCLASSIFIED



UNCLASSIFIED PROCESSING DATE--160CT70
TITLE--INFLUENCE OF ROTATION SPEED OF A DISK CONTACTOR DURING THE REFINING
OF DILS WITH FURFURAL -U-

AUTHOR-(03)-PEREPELITSKIY, B.B., MIRZOYEV, S.D., DAVIDYAN, L.K.

COUNTRY OF INFO--USSR

SOURCE--IZV. VYSSH. UCHEB. ZAVED., NEFT GAZ 1970, 13(1), 63-4

DATE PUBLISHED ---- 70

SUBJECT AREAS--MATERIALS

TOPIC TAGS--LUBRICATING DIL, FURFURAL, LUBRICANT REFINING

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1996/1637

STEP NO--UR/0152/70/013/001/0063/0064

CIRC ACCESSION NO--ATOII8616

UNCLASSIFIED

IRC ACCESSION NOATO BSTRACT/EXTRACT(U) PRIMEZO 0.9143-0.91	GP-O- A	ATIC VISO	COSITY O	F 100DEGF	REES 6.5	2-10.35	CST,	
AT INTAKE VELOCITY (WT. RATIO 0.9-1.2:1) OIL DISTILLATE OF D	, THE TITE	E DISK S	SPEED WA	S 250-300	RPM.	FOR DIE	SEL	
PRIME3-M PRIME2-HR, RPM. FACILIT	AND WT.	RATIO 1.8	BDEGREES	1, THE SE	PEED WAS	300-40	0.0	
USSR.								
				4.				
							-	
선생님, 그 사람들은 중요한 사람들이 되었다. 연구								
수 있는데 100 분들은		· ·						
eg.								
•		SSIFIED						

Industrial

USSR

DAVIDYANTS, G. P., BELEN'KIY, V. I., DAVIDYANTS, G. G., ALEKSEYEV, V. A.

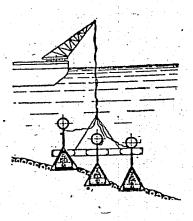
"Device for Mining of Useful Minerals From Underwater Deposits"

Otkrytiya Izobreteniya Promyshlennye Obraztsy Tovarnyye Znaki, No 5, 1972, Patent No 359397.

Translation: A device for mining of useful minerals from underwater deposits, having magnetic susceptibility, including a frame, working organs with electromagnets and hollow spheres, differing in that in order to assure better contact of the working organs with the uneven surface of the bottom, the working organs are connected to the hollow spheres by means of lines passing through apertures in the frame.

1/1

DAVIDYANTS, G. P., BELEN'KIY, V. I., ET. AL., Otkrytiya Izobreteniya Promyshlennye Obraztsy Tovarnyye Znaki, No 5, 1972, Patent No 469497.



2/2

_ 61 _

Industrial

USSR

DAVIDYANTS, G. P., BELEN'KIY, V. I., DAVIDYANTS, G. G., ALEKSEYEV, V. A.

"Device for Mining of Useful Minerals From Underwater Deposits"

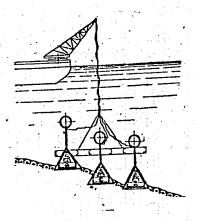
Otkrytiya Izobreteniya Promyshlennye Obraztsy Tovarnyye Znaki, No 5, 1972, Patent No 359397.

Translation: A device for mining of useful minerals from underwater deposits, having magnetic susceptibility, including a frame, working organs with electromagnets and hollow spheres, differing in that in order to assure better contact of the working organs with the uneven surface of the bottom, the working organs are connected to the hollow spheres by means of lines passing through apertures in the frame.

1/1



DAVIDYANTS, G. P., BELEN'KIY, V. I., ET. AL., Otkrytiya Izobreteniya Promyshlennye Obraztsy Tovarnyye Znaki, No 5, 1972, Patent No 469497.



2/2

- 61 -

UDC 546.48 22:548:537.311.31

GALUSHKA, A. P., DAVIDYUK, C. YE., DUBOVOY, V. K., and KONOZENKO, I. D., Institute of Nuclear Research of the Academy of Sciences Ukrainian SSR

"Investigation of Nonuniformity of Specific Electrical Conductivity of Single CdS Crystals"

Moscow, Neorganicheskiye Materialy, vol. 9, No 5, May 73, pp 750-754

Abstract: This article considers the nature of nonuniform distribution of the specific electrical conductivity of single CdS crystals and the effect of nonuniformity on the Hall mobility of electrons. Single CdS crystals, obtained by the method of zone sublimation, were used in the investigation. A nonuniform distribution of fast recombination s-centers is evident in single CdS crystals which leads to nonuniform distribution of the specific electrical conductivity over the length of the specimen. The mobility of conductors determined in such specimens from the data of Hall effect can be significantly different from that of actual Hall mobility $\mu_{\,\rm X}$. In determining the mobility of conductors in single CdS crystals from the experimental data

1/2

GALUSHKA, A. P., et al, Neorganicheskiye Materialy, Vol. 9, No 5, May 73, pp 750-754

according to the Hall effect, it is always necessary to take into account the nonuniformity of distribution of the specific electrical conductivity in the specimen. In specimens with nonuniform distribution of the recombination centers over the entire length of the specimen the dependence of nonuniformities of the distribution of specific electrical conductivity and of μ_3 on the intensity of short exposure will be will be higher at high temperatures (200-350°K) than at lower ones. The lowering of temperature results in decreased nonuniformity.

2/2

- 40 -

1/2 027 UNCLASSIFIED PROCESSING DATE--18SEP70
TITLE--ANISOTROPY OF PARAMAGNETIC Y CENTERS IN LITHIUM FLUORIDE CRYSTALS
-U-

AUTHOR-(05)-DAVITASHVILI, T.SH., DZHORDZHISHVILI, L.I., KALABEGISHVILI,

T.L., POLITOV, N.G., SOBOLEVSKAYA, S.V.

COUNTRY OF INFO--USSR

SOURCE--FIZ. TVERD. TELA 1970, 12(1), 289-91

DATE PUBLISHED ---- 70

SUBJECT AREAS-MATERIALS, PHYSICS

TOPIC TAGS--ANISOTROPY, LITHIUM FLUORIDE, OPTIC PROPERTY, LIGHT

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1984/0222

STEP NO--UR/0181/70/012/001/0289/0291

CIRC ACCESSION NO--APO055018

· UNCLASSIFIED

and the state of the state of the state of the first of the state of t

tage of the Portion Secretal restricted and administration of the Control of the

2/2 027 UNCLASSIFIED PROCESSING DATE--18SEP70 CIRC ACCESSION NO--AP0055018 ABSTRACT/EXTRACT--(U) GP-O- ABSTRACT. EPR SPECTRA WERE INVESTIGATED OF SINGLE CRYSTALS OF LIF AFTER IRRADN. WITH A PRIMEGO CO SOURCE IN A REACTOR WITH EMPHASIS ON THE Y LINE, APPEARING AFTER NONISOTHERMAL ANNEALING OF IRRADIATED CRYSTALS. OPTICAL ABSORPTION SPECTRA WERE ALSO RECORDED BEFORE AND AFTER ANNEALING. FIN GAMMA TRRADIATED NONANNEALED CRYSTALS F AND M ABSORPTION BANDS WERE OBSD. AFTER NONISOTHERMAL ANNEALING OF THESE CRYSTALS, A WEAK F BAND REMAINED IN THE OPTICAL ABSORPTION SPECTRUM AND ONLY A Y LINE IN THE EPR SPECTRUM. DEPENDENCES WERE MEASURED OF THE WIDTH DELTA H AND G FACTOR ON ORIENTATION OF THE CRYSTAL IN AN EXTERNAL CONST. MAGNETIC FIELD H. WHEN H PARALLEL TO (010) ALL OF THE AXES (111) FORM AN ANGLE OF 54.7DEGREES WITH H. CENTERS OF GRAVITY OF ALL 4-LINES COINCIDE AND DISPLACEMENTS RELATIVE TO THE LINES ARE ABSENT. WHEN H PARALLEL TO (110), I PAIR OF THE 4 AXES (111) PFORMS WITH HEAN ANGLE OF 35.3DEGREES, AND 2ND PAIR AN ANGLE OF 90DEGREES. THE CENTERS OF GRAVITY COINCIDE FOR THE SEP . LINES IN EACH PAIR: WHEN H PARALLEL TO (111), THE REMAINING 3 AXES (111) FORM WITH H AN ANGLE OF 72DEGREES. THE LINES ARE SEPD. INTO 2 GROUPS CONSISTING OF 1 AND 3 LINES, RESP. THE WIDTH AND G FACTOR ARE DETD. BY THE DISPLACEMENTS BETWEEN THE GROUPS OF LINES. IT FOLLOWS THAT Y CENTERS POSSES AN AXIS OF AXIAL SYMMETRY ALONG (1111).

UNCLASSIFIED

16. USB *Our form Sentiation Network* Norwer, Fresh, 13 Am 71, p. p. Astron. Treat, 21 Am 72, p. p. Astron. Treat, 22 Am 7

UDC 911.2:551.510.42

DAVITAYA, F. F., Institute of Geography imeni Bakhushti, Academy of Sciences Georgian SSR

"Pollution of Earth's Atmosphere and Changes in Its Gaseous State"

Moscow, Izvestiya Akademii Nauk SSSR, Seriya Geograficheskaya, No 4, Jul/Aug 71, pp 5-17

Abstract: Because of man's economic activity, the amount of free oxygen in the Earth's atmosphere needed to support life tends to decrease, and steps to maintain the state of the atmosphere must be taken at once. Pollution of the atmosphere has increased substantially in the last decade, and polluted air, containing large amounts of toxic substances, is harmful to man. Many of these substances can be absorbed from the air by certain plants. The following steps are suggested: cessation of unnecessary logging operations, forestation, irrigation of deserts and crop planting with protective "green" belts, tree planting and landscaping of urban centers, and the introduction of methods of cultivating soil to prevent wind erosion. Dumping large amounts of smoke and other combustion products by industry, transport, etc., into the air must be stopped, and factories must operate with the use of a closed exhaust system of all industrial byproducts. Some 10 billion tons 1/2

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

UNCLASSIFIED PROCESSING DATE--11SEP70
TITLE--PROBLEMS OF MOUNTAIN CLIMATOLOGY, THEIR APPLIED IMPORTANCE AND WAYS
OF SOLUTION -U-

AUTHOR--DAVITAYA, F.F., DROZDOV, O.A.

COUNTRY OF INFO--USSR

SOURCE--METEOROLOGIYA I GIDROLOGIYA, 1970, NR 4, PP 59-71

DATE PUBLISHED----70

SUBJECT AREAS -- ATMOSPHERIC SCIENCES

TOPIC TAGS--CLIMATOLOGY, MOUNTAIN

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1987/1039

STEP NO--UR/0050/70/000/304/0059/0071

CIRC ACCESSION NO--AP0104437

UNCLASSIFIED

2/2 011 CIRC ACCESSION NOAP01044			
ABSTRACT/EXTRACT (U) GP-0	- ARSTRACT, PRINCIPAL	REGULARITIES OF CLIMATE	
FORMATION IN MOUNTAIN RE OF MOUNTAIN CLIMATOLOGY	ADE DETERMINED: SUICILL	TN OF THERE EXPORED TO BE	
PARAMOUNT IMPORTANCE FOR RESORTS AND SANATORIUMS, COMPLEX MASTERING OF MOU	TOUDICM AND MINIMAINED	RICULTURE, CONSTRUCTION OF ERING, WATER POWER, S FOR THE SOLUTION OF	
THESE PROBLEMS ARE DRAWN	UP.		
			•
			•
-	UNCLASSIFIED		

1/2 009 TITLE--FERTILIZERS FOR SALINE SOILS -U-

UNCLASSIFIED

PROCESSING DATE--1155P70

AUTHOR-DAVIY, K.A.

COUNTRY OF INFO--USSR

SOURCE--KHIM. SEL. KHOZ. 1970, 8(1) 18-20

DATE PUBLISHED----70

SUBJECT AREAS--EARTH SCIENCES AND OCEANOGRAPHY, AGRICULTURE

TOPIC TAGS--SOIL TYPE, FERTILIZER APPLICATION, UREA FORMALDEHYDE, CHLORINE

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1990/1161

STEP NO--UR/0394/70/008/001/0018/0020

CIRC ACCESSION NO--AP0109278

22222222222 UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

UNCLASSIFIED PROCESSING DATE—-ILSEPTO

2/2 009
CIRC ACCESSION NO—-APO109278

ABSTRACT/EXTRACT—(U) GP—0— ABSTRACT. THE STUDY IS CARRIED DUT WITH
ARCNER POTS (24 KG SDIL) AND SALINE SDILS (UP TO 0.544PE*CENT CHLOPIDE).

WAGNER POTS (24 KG SDIL) AND SALINE SDILS (UP TO 0.544PE*CENT CHLOPIDE).

TWO FERTILIZE'S WERE APPLIED: SEMILIQUID MANURE (10—30 TONS HA) AND
TWO FERTILIZE'S WERE APPLIED: SEMILIQUID MANURE DECREASES THE TOXICITY OF
UREA FORMALDEHYDE (UF, 150 KG—HA). THE MANURE DECREASES THE TOXICITY OF
CL PRIME NEGATIVE ALTHOUGH ITS CONCN. OF CL PRIME NEGATIVE IN THE SOIL
CL PRIME NEGATIVE IS ADSORBED BY UF.

EXT. IT IS BELIEVED THAT CL PRIME NEGATIVE IS ADSORBED BY UF.

Immunology



UDC 619-002.73-085.371-039.71(47)

TORSUYEV, N. A., Donetsk, POGORELOV, V., and DAVLEKAMOVA, F., Astrakham' and KHARABADZHAKHOV, K., Rostov-na-Donu

"Experience with Active Immunoprophylaxis of Laprosy with BCG Vaccine in the USSR"

Moscow, Vestnik Dermatologii i Venerologii, No 1, 1970, pp 76-78

Abstract: Prophylactic inoculation of children and adults with BCG vaccine in recent years has produced excellent results in protecting the population against leprosy in various endemic areas of the USSR. For example, in the Muynak region of the Kara-Kalpak ASSR, only 1 or 131 children inoculated in 1967 with BCG vaccine developed a tuberculoid element (which soon regressed), whereas 15 of 231 nonvaccinated children contracted the disease (both groups of children had leprous children contracted the disease (both groups of children had leprous children contracted the disease (both groups of children had leprous children contracted the disease (both groups of children had leprous children contracted the disease (both groups of children had leprous children contracted the disease (both groups of children had leprous children contracted the disease (both groups of children had leprous children contracted the disease (both groups of children had leprous children contracted the disease (both groups of children had leprous children contracted the disease (both groups of children had leprous children contracted the disease (both groups of children had leprous children contracted the disease (both groups of children parents). Some 70,000 persons in the Kazakh SSR were vaccinated and followed up for 5-10 years. An average of 197 new cases were detected annually in this republic from 1956 to 1960, but only 74 cases from 1960 to 1965. These data confirm the experience gained with BCG vaccine in other parts of the world, i.e., the incidence of leprosy is much lower in vaccinated populations than in nonvaccinated ones. 1/2

CIA-RDP86-00513R002200620006-3 "APPROVED FOR RELEASE: 08/09/2001

USSR

TORSUYEV, N. A., et al., Moscow, Vestnik Dermatologii i Venerologii, No 1, 1970, pp 76-78

The authors strongly recommend the compulsory vaccination of all newborn infants in endemic zones, with reimmunization at definite intervals of time thereafter. The vaccine produces no complications.

2/2

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

PROCESSING DATE--300CT70 1/2 028 TITLE--DETERMINATION OF THE AMOUNT OF HYDROGEN IN CATALYSTS AT HIGH TEMPERATURES BY THE HYDROGENATION OF ETHYLENE -U-AUTHOR-(05)-IZMAYLOV, R.I., FEDOROV, G.I., KHAYRULLINA, R.Z., BORISOVA, COUNTRY OF INFO-USSR SOURCE--IZV. AKAD. NAUK SSSR, SER. KHIM. 1970, (2), 369-72 DATE PUBLISHED----70 SUBJECT AREAS--CHEMISTRY TOPIC TAGS--HYDROGEN, HYDROGENATION, ISOMERIZATION, HYDROCARBON, PALLADIUM, NICKEL, CATALYST, SORPTION, HIGH TEMPERATURE EFFECT, ETHYLENE, PLATINUM, CHROMATOGRAPHY CONTROL MARKING--NO RESTRICTIONS DOCUMENT CLASS--UNCLASSIFIED STEP: NO--UR/0062/70/000/002/0369/0372 PROXY REEL/FRAME--1997/0639 CIRC ACCESSION NO--APO119551 UNCLASSIFIED

PROCESSING DATE--300CT70 UNCLASSIFIED -028 2/2 CIRC ACCESSION NO--APO119551 ABSTRACT/EXTRACT--(U) GP-O- ABSTRACT. A DETAILED DESCRIPTION IS GIVEN FOR THE CONSTRUCTION AND OPERATION OF APP. FOR DETG. SURBED H AT 150-5000EGREES, I.E. UNDER CONDITIONS USUALLY USED FOR HYDROGENATION AND ISOMERIZATION REACTIONS OF HYDROCARBONS. THE APP. CONSISTS OF A REACTION VESSEL CONTG. A 2-3 MG SAMPLE OF THE CATALYST BEING TESTED, PLACED IN A FLOW SYSTEM SIMILAR TO THAT OF A CHROMATOGRAPH AND PROVIDED WITH SWITCHABLE SOURCES OF ARGON, H, AND C SUB2 H SUB4. THE AMT. OF SORBED H ON 12 TYPICAL PT, PD AND NI CATALYSTS ON VARIOUS SUPPORTS WAS TABULATED AS WAS THE INFORMATION OF SORPTION OF H AT VARIOUS TEMPS. ON PROMOTION BY SALTS OF MN PT AND NI AND PD CATALYSTS UP TO 500DEGREES. AND CR ENHANCES THE STRENGTH OF BONDING OF H TO THE METAL. FACILITY: INST. ORG. FIZ. KHIM. IM. ARBUZOVA, KAZAN, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

UDC: 621.438.253.5:531.781.2

Zenukov, A. G., Sal'nikov, G. M., Davletbayev, A. M.

"Peculiarities of the Thermal and Stressed State of Cooled Envelope-type Blades"

Kazan', Izvestiya Vysshikh Uchebynkh Zavedeniy, Aviatsionnaya Tekhnika, No 1, 1972, pp 72-77.

Abstract: This work studies the influence of the primary dimensions on the temperature state of elements of a turbine blade with a large number of channels for cooling, located near the gas surface. The influence of shell thickness and rib width on the temperature state of elements of the blade is studied and the variations in strength reserve of the ribs are analyzed. Recommendations are given for selection of shell thickness and rib width in the design of envelope-type blades.

1/1

UNCLASSIFIED PROCESSING DATE--11SEP70
TITLE--ANALYSIS OF METHODS FOR CONSTRUCTING A CONVENTIONAL FUNCTION OF
RIVER RUNDER DISTRIBUTION -U-

AUTHOR-DAVLETGALIYEV, S.K.

COUNTRY OF INFO--USSR

SOURCE--METEOROLOGIYA I GIDROLOGIYA, 1970, NR 2, PP 76-85

DATE PUBLISHED ---- 70

SUBJECT AREAS--EARTH SCIENCES AND OCEANOGRAPHY

TOPIC TAGS--RIVER, RUNOFF, FUNCTION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1987/0872

STEP NO--UR/0050/70/000/002/0076/0085

CIRC ACCESSION NO--AP0104308

UNCLASSIFIED

UNCLASSIFIED PROCESSING DATE--11SEP70 2/2 008 CIRC-ACCESSION NO--AP0104308 ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE DEGREE OF MUTUAL DIVERGENCE OF CONVENTIONAL FUNCTIONS OF RIVER RUNDER DISTRIBUTION, CONSTRUCTED WITH DIFFERENT METHODS IS ESTIMATED WITH THE COEFFICIENT OF INFORMATION MEASURE OF DIVERGENCE (I). THE MOST DIVERGENCE TAKES PLACE IN THOSE CASES WHEN CONVENTIONAL DISPERSION DOES NOT REMAIN CONSTANT AS THE ARGUMENT CHANGES. IF THE EXTREMUM OF MATHEMATICAL EXPECTATION OF PURPOSE FUNCTIONS IS TAKEN AS THE CRITERION OF OPTIMALITY, DIFFERENCES BETWEEN CONVENTIONAL FUNCTIONS AT MAGNITUDES I IS LESS THAN 0.50 DO NOT TELL ON THE SELECTION OF OPTIMAL SOLUTION.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

UDC: 533.6.07

DAVLET-KIL'DEYEV, R. Z.

"Particulars of Flow and Heat Exchange on a Body of Revolution Surrounded by a Supersonic Gas Flow"

Uch. zap. Tsentr. aerogidrodinam. in-ta (Scientific Notes of Central Aerohydrodynamics Institute), 1971, 2, No 6, pp 103-107 (from RZh-Mekhanika, No 5, May 72, Abstract No 5B556)

Translation: The paper presents the results of an experimental study of flow and heat exchange on the surface of a cylinder having a nose cone with vertex half-angle of 13.5° located in a thermal wind tunnel at angles of attack $\alpha=0^{\circ}$, 10° and 20° , M=5 and $R_{\infty}=10^{7}$ m $^{-1}$. Heat fluxes were measured by the method of heat-indicator coatings, while the nature of the flow was determined from washed out points and from the results of heat-transfer measurements. At $\alpha=0^{\circ}$ and 10° the heat fluxes coincided with the calculated value for laminar flow; flow around the body was undetached. At $\alpha=20^{\circ}$ flow became detached, and a zone of elevated heat fluxes appeared on the leeward surface; at the same time, two three-dimensional funnel shaped tapering vortexes appeared above the leeward surface. B. I. Bakum.

1/1

. 1.1

0										DAVL	
vienie ži (vienie		*								ET-	
e University of the						* 1				KIL.	
	-									DEY	· ·
						ŧ.				EV	~ . /
										· K	0
2754 H (12		a Rone,	d above the	funnel-shaped vortices simultaneously appeared above	taneousl	e stinul	vortice	shaped	funnel-		>
	99	calculations for laminar flow; the flow around the body was accepted and a zone of increased heat. At a =20° the flow became detached and a zone of increased heat fluxes appeared on the lee surface. Two three-dimensional expanding	the flow became detached and a zone of increased heat the flow became detached and a zone of increased heat peared on the lee surface. Two three-dimensional exp	nd a zone	tached at	appeared on the lee surface.	or lamin Ilow bed	o the i	calculutio At d=20° fluxes app		
	7	determined on the basis of washed-out points and the results of heat transfer measurements. At a=0° and 10°, the heat flow agreed with	nd the rest	t points ar	of washed-out At a=0 and	is of wa	the bas	ned on	determined on the basis transfer measurements.		
		13.5°. Tests were carried out in a thermal wind tunnel at angles of attack $\alpha = 0^{\circ}$, 10° , and 20° , $N = 5$, and $R_{\infty} = 10^{\circ}$ m ⁻¹ . The heat flow pattern when the flow pattern we have the flow pattern when the flow pattern we have the flow pattern when the flow pattern we have the flow pattern when the flow pat	nd tunnet a	a thermal wind and Rec = 10 ⁷	out in a th	and 20°, N	were ca	Tests	13.5°. Tes attack a= 0°		Tara
	of the	The results are presented of an experimental investigation of	rimental ir Inder with	f an exper	sented of	The results are presen	results	The heat o	flow and		
							50556)	no.			
	4.54	Uchenyye zapiski Tsentral'nogo zero-gidrodinamicheskogo instituta, v. 2, no. 6, 1971, 103-107. (RZhMekh, 5/72,	piski Tsentral'nogo acro-gidrodinamichesk 2, no. 6, 1971, 103-107. (RZhMekh, 5/72)	ogo acro-	entral'n 6, 1971,	piski Ti	Uchenyye za instituta, v.	Uche			1 11
a Wall		intic s	Davlet-Killdeyev, R. Z. Heat and flow characteristics of a body of revolution in a supersonic pas flow. IN:	t and flow	. Z. Hea	eyev, R.	Davlet-Killdeyev,	Davle of a			
	ng é gyant der haber		:								
							-		g/cm ³ .	gq.	
	. 23	If the maximum value of gas density attained was 0.2-0.23	section a ty attained	nonuniformity of density distribution of the cross section was revealed. The maximum value of gas density attaine	nonuniformity of density distribution of the new revealed. The maximum value of gas	y distril	f densit	mity of	nonuniformity was revealed.	4 ½ 9	:
	ent	ries of the sional	proposed method made it possible to determine the boundaries of the potential values and the characteristics of the three-dimensional potential values and the characteristics of the three-dimensional potential values.	termine to of the thr	ble to del teristics	it possi	made and the	method	oposed	- 'g 'g :	
		n. The	E.C.C. 19. Were such that the minimum size of the steel ball was 2 mm.	steel ball	te of the	mum si:	he mini	that t	ere suci	<u> </u>	
	9				20	12 140 / 5 MAY 13	15 01	7/20 /		RAN/	3
	55.									:	

UDC 629.78.015;533.6.011.6

DAVLET-KIL'DEYEV, R. Z

"Specifics of Flow and Heat Exchange on a Body of Rotation, Around Which a Supersonic Gas Stream Flows"

Uch. zap. Tsentr. Aero-gidrodinam. Inta [Scientific Writings of Central Aero-Hydrodynamics Institute], Vol 2, No 6, 1971, pp 103-107, (Translated from Referativnyy Zhurnal, Raketostroyeniye, No 4, 1972, Abstract No 4.41.160 from the Resume).

Translation: Results are presented from an experimental study of the flow and heat exchange on the surface of a body of rotation with a conical nose with a half aperture angle 0 = 13°, 5. Tests were performed for angles of attack of 0°, 10° and 20° with values of M= 5, $Re_{\infty L}$ = 10⁶ (L = 0.1 m). The

heat fluxes were measured by the method of thermo indicator coatings. The results of tests are compared with theoretical results. A three-dimensional flow diagram is presented. It is shown that sharp increases in heat transfer may occur in narrow strips located both along an across the body. 6 Figures; 6 Biblio. Refs.

1/1

UNCLASSIFIED PROCESSING DATE--11SEP70
TITLE--ESTIMATE OF THE AVERAGE AMOUNT OF GOLD IN MAIN ROCK FORMING

MINERALS OF INTRUSIVE ROCKS -U-

AUTHOR -- DAVLETOV . I.K.

COUNTRY OF INFO--USSR

SOURCE--DOKL. AKAD. NAUK SSSR 1970, 190(6), 1448-50 (GEOCHEM)

DATE PUBLISHED----70

SUBJECT AREAS--EARTH SCIENCES AND OCEANOGRAPHY

TOPIC TAGS-GOLD, MIMERAL, IGNEOUS ROCK

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1990/0292

STEP NO--UR/0020/70/190/005/1448/1450

CIRC ACCESSION NO--ATOLO8590

ZZZZZZZZZZZ UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

2/2 009 UNCLASSIFIED PROCESSING DATE--11SEP70 CIRC ACCESSION NO--ATO108590 ABSTRACT/EXTRACT-- (U) GP-0-ABSTRACT. AV. CONTENTS OF AU IN MAIN ROCK FORMING MINERALS WERE DETD. BY STATISTICAL PROCESSING OF 328 ANALS. FOR AU IN GRANITIC POCKS OF CHATKALISK REGION AND LITERATURE DATA (FIGURES IN PARENTHESES INDICATE THE NO. OF ANALS. 1. THE MINERALS IN INTRUSIVE ROCKS, ACCORDING TO LITERATURE DATA, CONTAIN THE FOLLOWING AMTS. OF AU: QUARTZ (55) 0.00102, FELDSPAR (65) 0.0020, BIOTITE (134) 0.0030, HORNBLENDE (59) 0.0032, MAGNETITE (52) 0.0039, AND SPHENE (17) 0.0044 PPM. THE AV. CONTENTS OF AU IN ROCK FORMING MINERALS IN CHATKAL'SK GRANITIC ROCKS DIFFERED SOMEWHAT FROM THESE AV. CONTENTS BEING QUARTZ (36) 0.0017, FELDSPAR (32) 0.0017, BIDTITE (120) 0.0071, HORNBLENDES (55) 0.0004, MAGNETITE (40) 0.0033, SPHENE (15) 0.0093, AND ACCESSORY MINERALS (30) 0.536 PPM. 77777777777 UNCLASSIFIED

DAVNIS, V. V., RUSSMAN, I. V. and SHTEYN, B. Ye.

"One Method of Classification"

Vopr. Optimal'n. Programmir. v Proizv. Zadachakh [Problems of Optimal Programming in Production Problems -- Collection of Works], Voronezh, 1972, pp 105-117 (Translated from Referativnyy Zhurnal Kibernetika, No 9, 1973, Abstract No 9V545).

Translation: The following interpretation of the class of "similar objects" is studied. Suppose there is a finite set of objects, each of which is described by a fixed set of characteristics. Among all possible permissible subdivisions of this set of objects into classes, the problem is to find that, the classes of which satisfy the following condition. For an arbitrarily selected object of a certain class, at least one object of the same class must be found, the interrelationship with which is stronger than with any object not belonging to this class.

The problem of subdivision into classes (in terms of graph theory) is formalized for this interpretation. The authors present the following

Theorem 1. The different distances between the subsets of all possible division of set $R = \{1, 2, ..., N\}$ into two classes number not over N-1, and

1/2

בי

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

Davnis, V. V., Russman, I. V. and Shteyn, B. Ye., Vopr. Optimal'n. Programmir. v. Proizv. Zadachakh, Voronezh, 1972, pp 105-117.

they are all realized on the lines of the tree of minimum distances (TMD).

Using this theorem, the authors reduce the solution of the problem stated to the construction of a TMD and determination of the lines of maximum length. A classification algorithm is described, based on the construction of TMD, for which a program was written for a Minsk-22 computer. The problem, requiring subdivision of 270 objects, each of which is described by 10 characteristics, into classes, was solved in 20 minutes.

Yu. Finkel'shteyn

7 /7

KARTUSHINA, L. I., ROZHKOVA, A. M., DAVRONOVA, A. M., SAMSONOVA, Z. F., and YAKUBOVA, M. YA., Uzbek Scientific Research Institute of Epidemiology, Microbiology, and Infectious Diseases, and Bacteriological Department, Children's Railroad Hospital No 3, Tashkent

"A Placenta and Yeast Hydrolysate as the Basis for a Nutrient Medium for Growing Pathogenic Microbes"

Tashkent, Meditsinskiy Zhurnal Uzbekistana, No 1, 1970, pp 81-83

Abstract: Numerous substitutes for nutrient materials also include placental fluid hydrolyzed with yeast. In this investigation, we determined the feasibility of using placental tissue as nutrient material, by hydrolyzing it with brewer's yeast. A mixture of 1 kg of ground placenta 2 l of brewer's yeast, and 2 l of tap water was kept at 50° C for 6 days, with periodic stirring. Then, the supernatant fluid was decanted. This placenta and yeast hydrolysate, with a high amine nitrogen (400-420 mg%) and peptone (2.3-2.5%) content, was inactivated at 80° C. To prepare nutrient media, the hydrolysate was appropriately diluted, the pH was adjusted, and wither salt or glucose was added. Control media were made from the 1/2

- 23 -

KARTUSHINA, L. I., et al., Tashkent, Meditsinskiy Zhurnal Uzbekistana, No 1, 1970, pp 81-83

Khottinger's broth. Various strains of Shigelia, Salmonella, Escherichia, and Staphylococcus were cultured in sugar media, totaling 225 cultures. In 24 hours, the yields from the experimental and control cultures were equal. Salt media were used as elective nutrients to isolate Staphylococci from feces and vomitus of patients with acute gastronintestinal disorders. Sixty-five parallel tests were carried out. In 24 cases, the Staphylococci were simultaneously isolated from the experimental and the control cultures. This indicates that salt-containing nutrient media made from a placenta and yeast broth have elective properties matching those of media made from the Khottinger's broth.

2/2

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

1/2 018 UNCLASSIFIED PROCESSING DATE--300CT70
TITLE--MOLECULAR WEIGHT AND MOLECULAR DIMENSIONS OF POLYDIOXOLANE -U-

AUTHOR-(04)-BERMAN, YE.L., PRAVIKOVA, N.A., LYUDVIG, YE.B., DAVTYAN, A.G.

COUNTRY OF INFO--USSR

SOURCE-- VYSOKOMOL. SOEDIN., SER. A 1970, 12(3), 580-4

DATE PUBLISHED ---- 70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS-CATALYTIC POLYMERIZATION, DRGANIC OXYGEN COMPOUND, MOLECULAR WEIGHT, INTRINSIC VISCOSITY, CYCLIC GROUP, ORGANOANTIMONY COMPOUND, HETEROCYCLIC OXYGEN COMPOUND

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1995/1205

STEP NO--UR/0459/70/012/003/0580/0584

CIRC ACCESSION NO--APO116670

UNCLASSIFIED

UNCLASSIFIED PROCESSING DATE--300CT70 CIRC ACCESSION NO--APOLL6670
ABSTRACT/EXTRACT--(U) GP-O- ABSTRACT. THE MOL. WT. (M SUBW),
POLYDISPERSITY, AND MOL. DIMENSIONS OF POLYDIDXOLANE (I) (PREPD. BY POLYMN. OF 1,3,DIOXOLANE IN ETCL IN THE PRESENCE OF ET SUB3 OSBCL SUB6) WERE STUDIED IN PHCL. THE INTRINSIC VISCOSITY (ETA) (DL.-G, PHCL, 25DEGREESC) EQUALS 2.0 TIMES 10 PRIME NEGATIVE3 M SUBW PRIMEO.5, WITHIN THE RANGE OF 0.6 IS SMALLER THAN (ETA) IS SMALLER THAN 1.6. THE POLYDISPERSITY AND THE QUADRATIC RADII OF INERTIA (R SUBZ PRIMEZ) PRIMEO.5 WERE CALCD. I HAVING (ETA) SMALLER THAN 0.6 EXHIBITED HIGH POLYDISPERSITY. CYCLIC MOLS. WERE SOMETIMES FORMED IN I HAVING (ETA) SMALLER THAN 0.6. FACILITY: FIZ. KHIM. INST. IM. KARPOVA, MOSCOW, USSR.

UNCLASSIFIED

Biochemistry

USSR

1

VDC: 577.155.34

DAVTYAN, M. A., and BUNYATYAN, G. KH., Institute of Biochemistry, Academy of Sciences Armenian SSR, Yerevan

"Purification and Properties of Arginase of the Rat Brain"

Moscow, Biokhimiya, Vol 35, No 2, Mar-Apr 70, pp 412-418

Abstract: Arginase was isolated from a homogenate of the brains of rats by applying the following steps: three-fold freezing and thawing in the presence of MaCl₂ combined with heating to 60° and centrifuging; extraction of lipids with ether; fractional precipitation with MeOH; gel filtration through Sephadex G-200; chromatography on KM-Sephadex G-50; two-fold chromatography on DEAE-Sephadex A-50. The activity of the arginase obtained by this procedure was 1470 times higher than that of the homogenate and its yield 36%. The arginase showed a high degree of homogeneity in paper electrophoresis and centrifuging. It has an L-arginine-splitting activity which was considerably higher than that of liver arginase, had a molecular weight of 62,000 vs. 118,000 for liver arginase, and differed from the latter with respect to the amino-acid composition. The data obtained by the authors indicated that brain arginase was distinct from the weolytic enzyme

1/2

USSR

DAVTYAN, M. A., and BUNYATYAN, G. KH., Biokhimiya, Vol 35, No 2, Mar-Apr 70, pp 412-418

present in the liver. Its principal localization in nuclei, which was established in earlier work by the authors, indicated that it may participate in the regulation of the synthesis of histones. The authors thank Academician A. YE. BRAUNSHTEYN and Doctor of Biological Sciences YE. V. GORYACHENKOV for allowing the opportunity to carry out evaluation of arginase of the brains of rats and for their valuable direction during the authors' period of work in the Laboratory of Chemical Principles of Biological Catalysis of the Institute of Molecualr Biology, Academy of Sciences USSR.

2/2

:c. Nr.: AP0028762

Ref. Code: UR 0050

PRIMARY SOURCE:

Meteorologiya 1 Gidrologiya, 1970, Nr 1,

pp 80-89

AUTHOR:

Davtyan, N. A.

MODELLING OF WIND CURRENTS FOR THE SOUTH ZONE OF LAKE BAIKAL

Taking the Lake Baikal as an example, ways and methods of modelling wind currents for closed water basins are considered in the paper. Some practical recommendations are given.

4

REEL/FRAME

19680199

12 day

1/2 026

UNCLASSIFIED

PROCESSING DATE--230CT70

TITLE--THE ROLE OF "FAT MOBILIZING FACTOR OF THE HYPOPHYSIS" IN
PATHOGENESIS OF DISTURBANCES OF LIPID METABOLISM IN DIABETES MELLITUS
AUTHOR-(03)-LEYTES, S.M., VIRSALADZE, D.K., DAVTYAN, N.K.

COUNTRY OF INFO--USSR

SOURCE--PATOLOGICHESKAYA FIZIOLOGIYA I EKSPERIMENTAL'NAYA TERAPIYA, 1970, VOL 14, NR 2, PP 74-79
DATE PUBLISHED----70

SUBJECT AREAS-BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--DONOR BLOOD, BLOOD SERUM, DIABETES MELLITUS, LIPID METABOLISM, ADIPOSE TISSUE, INSULIN, INHIBITION, PITUITARY GLAND

CONTROL MARKING--NO RESTRICTIONS

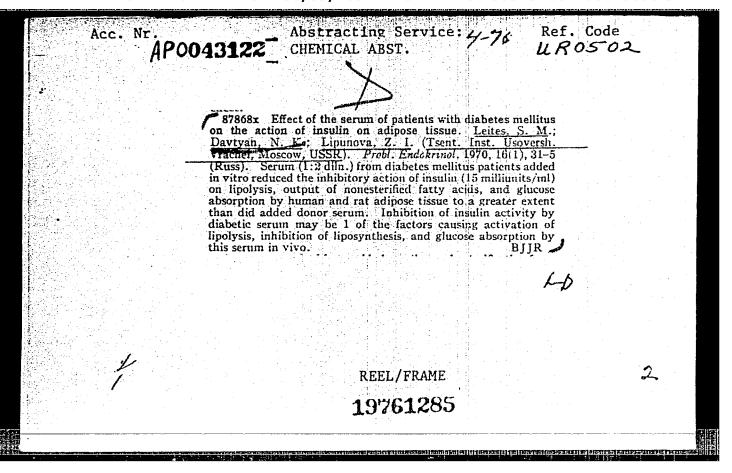
DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1988/0023

STEP NO--UR/0396/70/014/002/0074/0079

CIRC ACCESSION NO--AP0105122
UNCLASSIFIED

PROCESSING DATE--230CT70 UNCLASSIFIED 2/2 026 CIRC ACCESSION NO--APO105122 ABSTRACT. IN COMPARISON WITH THE EFFECT OF ABSTRACT/EXTRACT--(U) GP-0-LYOPHILIZED DIALYZATES OF THE SERUM (LDS) OBTAINED FROM DONORS, LDS OF PATIENTS SUFFERING FROM DIABETES MELLITUS PRODUCED A MORE PRONOUNCED EFFECT IN RESPECT TO INCREASE OF THE CONTENT OF NONESTERIFIED FATTY ACIDS (NEFA), OF BETA LIPOPROTEIDS AND PHOSPHOLIPIDS AND ALSO FO GLYCEMIA IN THE SERUM OF RABBITS TO WIHCH LDS WAS INJECTED INTRAVENOUSLY. THE ACTION OF LDS WAS MORE PRONOUNCED IN RESPECT TO THE EFFECT ON BETA LIPOPROTEIDS IN DIABETICS WITH A RELATIVELY GREATER LEVEL OF GLYCEMIA AND SERUM NEFA. IN VITRO EXPERIMENTS WITH ADIPOSE TISSUE DEMONSTRATED MORE PRONOUNCED FAT MOBILIZING PROPERTIES OF LDS OF THE PATIENTS SUFFERING FROM DIABETES MELLITUS IN COMPARISON WITH LDS OF DONORS. THIS PROPERTY OF LDS IN DIABETES PATIENTS IS PARTIALLY ASSOCIATED WITH INHIBITION OF INSULIN ACTION AND NORADRENALIN ACTIVATION. IT MAY BE ADMITTED THAT THE MENTIONED ACTION OF LDS IS CONDITIONED BY LIPOMOBILIZING PEPTIDES OF THE HYPOPHYSIS. FACILITY: KAFEDRA PATOLOGICHESKOY FIZIOLOGII TSENTRAL'NOGO INSTITUTA USOVERSHENSTVOVANIYA VRACHEY, MUSCOW.

UNCLASSIFIED



UDC 542.921+547.333.4

BABAYAN, A. T., MARTIROSYAN, G. T., DAVTYAN, N. M., Institute of Organic Chemistry, Academy of Sciences Armenian SSR

"Research in the Field of Amines and Ammonium Compounds. LXVII. Splitting of Quaternary Ammonium Salts Containing Alkyl Halide Groups"

Yerevan, Armyanskiy Khimicheskiy Zhurnal, Vol 23, No 3, 1970, pp 292-204

Abstract: It is shown that interaction of trimethyl(2,2,3,3-tetra-chloropropyl)ammonium iodide (I) with an equimolecular quantity of alcohol alkali produces trimethyl(2,3,3-trichloroallyl)ammonium iodide (II), i.e. splitting of the first molecule of hydrogen chloride takes place exclusively through the hydrogen atom from the γ -position to the nitrogen:

$$(CH_3)_3\stackrel{+}{N}-CH_3-CCI_3-CHCI_3$$
 $\xrightarrow{\overline{UH}}$ $(CH_3)_3\stackrel{+}{N}-CH_3-CCI_3-CCI_3$

Substitution of an alcohol solution of sodium ethylate for the alkali hydroxide gives trimethylamine (75%), acetaldehyde (52.6%) and carbon dioxide gas: 1/3

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

BABAYAN, A. T., et al., Armyanskiy Khimicheskiy Zhurnal, Vol 23, No 3, 1970, pp 292-294

$$\frac{C_{2}H_{5}O}{C_{2}H_{5}OH} = \frac{C_{2}H_{5}O}{C_{2}H_{5}} + \frac{C_{2}H_{5$$

When trimethyl(2,2,3,3-tetrachloro-3-phenylpropyl)ammonium iodide is interacted with alkali hydroxide, all chlorine atoms are converted to the ionic state yielding trimethyl-amine (95%) and phenylpropionic acid (91%): 2/3

~ 1, }

BABAYAN, A. T., et al., Armyanskiy Khimichskiy Zhurnal, Vol 23, No 3, 1970, pp 292-294

$$(CH_{3})_{3} \dot{N} - CH_{2} - CCI_{2} - CCI_{2} - C_{6}H_{5} \xrightarrow{OH} (CH_{3})_{3} \dot{N} - C = C \cdot CCI - C_{6}H_{5} \xrightarrow{OH} (CH_{3})_{3} \dot{N} - C = C \cdot CCI_{6} - C_{6}H_{5} \xrightarrow{OH} (CH_{3})_{3} \dot{N} - C_{6}H_{5} \cdot C = C \cdot CCI_{6} - CCI_{6}H_{5} \xrightarrow{OH} (CH_{3})_{3} \dot{N} - C_{6}H_{5} \cdot C = C \cdot CCI_{6} - CCI_{6}H_{5} \xrightarrow{OH} (CH_{3})_{3} \dot{N} - C_{6}H_{5} \cdot C = C \cdot CCI_{6}H_{5}$$

3/3

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

1/3 009 UNCLASSIFIED PROCESSING DATE--160CT70
TITLE--AMINES AND AMMONIUM COMPOUNDS. LXVI. SPLITTING OF QUATERNARY

AMMONIUM SALTS CONTAINING ALKYL HALIDE GROUPS -U-

AUTHOR-(03)-DAVTYAN, N.M., MARTIROSYAN, G.T., BABAYAN, A.T.

COUNTRY OF INFO--USSR

SOURCE--ARM. KHIM. ZH. 1970, 23(1), 38-44

DATE PUBLISHED ---- 70

SUBJECT AREAS--CHEMISTRY

TOPIC TAGS--QUARTERNARY AMMONIUM SALT, IODIDE, AMINE, BROMIDE, ALDEHYDE,

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1995/1448

STEP NO--UR/0426/70/023/001/0038/0044

CIRC ACCESSION NO--APOII6888

UNCLASSIFIED

PROCESSING DATE--160CT70 UNCLASSIFIED 2/3 009 CIRC ACCESSION NO--APOLL6888 ABSTRACT. HEATING ABSTRACT/EXTRACT-- (U) GP-0-2.3. DICHLORGALLYLTRIMETHYLAMMONIUM IODIDE (I) WITH 5 MOLAR EQUIVS. 20PERCENT NACH AT LOODEGREES GAVE SOPERCENT ME SUB3 N IPICRATE M. 215DEGREES) IN THE DISTILLATE. A TOTAL OF 40PERCENT PROPYNAL WAS ALSO FORMED, 15PERCENT AS SUCH (2,4,0INITROPHENYLHYDRAZONE (DNPH) M. 123DEGREES), AND 25PERCENT AS DERIVED ACETYLENE AND FORMIC ACID. 3,3, DICHLOROALLYLTRIMETHYLAMMONIUM (ODIDE (11) REFLUXED 6 HR WITH 5 MOLES NADET GAVE GOPERCENT ME SUB3 N AND 34PERCENT 1,1,3,TRIETHOXY,2,PROPENE (III), B SUB15 89-90DEGREES, D PRIMEZO 0.9168, III WITH ACID GAVE MALONALDEHYDE (DI DNPH M. N PRIMEZO SUBD 1.4249. 295DEGREES); WITH BR IT GAVE 2,8ROMO,3,3,DIETHOXYPROPIUNALDEHYDE, 8 SUB6 67-70DEGREES, N PRIME23 SUBD 1.4538 (DI DNPH M. 198DEGREES). 3,3, DICHLOROALLYLTRIMETHYLAMMONIUM BROMIDE SIMILARLY GAVE 72PERCENT ME 3,3,DICHLORDALLY(ALLYL)(DIMETHYL)AMMONIUM SUB3 N AND 25PERCENT III. BROMIDE (IV) GAVE 84.5PERCENT ME SUB2 NH (2.CYANOETHYL DERIV. 8 SUB680 165-7DEGREES; PICRATE M. 153DEGREES), AND 55PERCENT 2, ALLYL, 1, 1, 3, 3, TETRAETHOXYPROPANE (V), B SUB2 70-20EGREES, N PRIME20 SUBD 1.4472; WITH ACID IT GAVE THE CORRESPONDING ALDEHYDE; DI DNPH M. 278DEGREES. IV WITH MECH NACH GAVE ME SUB2 NH AND 2, ALLYL, 1, 1, 3, 3, TETRAMETHOXYPROPANE, B SUB3 67-8DEGREES, D PRIME20 1.0066. N PRIMEZO SUBD 1.4588. 2.3.DICHLOROALLYLTRIMETHYLAMMONIUM BROMIDE WITH NACH ETCH GAVE SOPERCENT ME SUB3 N AND 60.8PERCENT III. 2,3, DICHLOROALLY (ALLYL) (DIMETHYL) AMMONIUM BROMIDE WITH NAOH ETOH GAVE 70PERCENT ME SUBZ NH AND 25PERCENT V.

UNCLASSIFIED

3/3 009 UNCLASSIFIED PROCESSING DATE--160CT70 CIRC ACCESSIUN NO--APO116888 ABSTRACT/EXTRACT-- I REFLUXED 6 HR WITH MEDH NACH GAVE 70.5PERCENT OF A COMPO. C SUB8 H SUB18 C SUB2 IN (VI). M. 152DEGREES: 4.1PERCENT 1,1,3,TRIMETHOXY,2,PROPENE, B SUB680 138-40DEGREES, D PRIMEZO 0.9667, N PRIMEZO SUBD 1.4102, AND 25PERCENT ME SUB3 N. I SIMILARLY GAVE 78PERCENT VI, 17.5PERCENT ME SUB3 N. AND 6PERCENT III. II HEATED 6 HR AT 40-50 DEGREES WITH NACH ETOH GAVE SOPERCENT ME SUB3 N. AND 80.5 PERCENT NON CRYST. C SUB10 H SUB22 D SUB2 IN. DISTG. VI WITH AN. NACH GAVE 80PERCENT ME SUB3 N; ACIDIFYING THE DISTILLATE GAVE 54PERCENT MALONALDEHYDE (AS THE DNPH). VI HEATED 9 HR WITH DIL. HCL GAVE 30.8PERCENT MALONALDEHYDE AND 51.2PERCENT ME SUB2 N.HI, M. 260DEGREES. FACILITY: INST. ORG. KHIM., EREVAN, USSR.

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

<u>era secondo en munica, esa estabablecada e la formação de formação de formação de formação de formação de formações de fo</u>

PROCESSING DATE--17JUL 70 TITLE -- THE FAT CARECHYCRALE AS ABOLISM CURING CHERATIONS IN PATIENTS WITH DIABETES MELLITLS -U-

AUTHOR--DAVIYAN, N.K., MARKOV, I.N.

CCUNTRY OF INFC--USSR

SCURCE-KHIRURGIYA, 1970, NF 1, PP 109-114

DATE FLELISHED ----- 70

SUBJECT AREAS--BICLEGICAL AND MEDICAL SCIENCES

TORIC TAGS--CIABETES MELLITUS, SUGAR METABOLISM, CARBOHYDRATE METABOLISM, BIOLOGIC CPERATION, FAITY TISSUE, INSULING

CENTREL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--LNCLASSIFIED PRGXY REEL/FRAME--1977/1705

STEP NC--UR/C531/70/000/001/0109/0114

CIRC ACCESSION NE--APCC44850

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

Acc. Nr: APO 044850_

Ref. Code: UR 0531

PRIMARY SOURCE: Khirurgiya, 1970, Nr / , pp/09-//4

THE FAT-CARBOHYDRATE METABOLISM DURING OPERATIONS IN PATIENTS WITH DIABETES MELLITUS

N. K. Davtyan, I. N. Markov

Under study was the content of sugar and nonesterified fatty acids (NEFA) of the blood as well as the lipolytic activity of the fatty tissue in diabetic patients subjected to cavitary and minor operations. The control group comprised of patients subjected to the same operations but not suffering from diabetes. It was found that an increased blood sugar level at the beginning of the operation is seen only in diabetic cases. The content of nonesterified fatty acids increases both in diabetic and nondiabetic patients. In patients with diabetes at the end of the operation there is noted an increased of the lipolytic activity of the fatty tissue. To ensure normalization of the fat-carbohydrate metabolism in operations performed in patients with diabetes the authors recommend at the beginning of the operation a ½ morning dose of insulin and one Unit of insulin plus 2 gm of carbohydrates, in conditions of intravenous administration during the operation a 5 per cent glucose solution in a dose of 500-750 ml.

4//

.

DI

02

19771705

UDC 546.11+621.31

DAVTYAN, O. K., BURSHTEYN, I. I., All-Union Scientific Research and Planning and Design Institute of Complex Electrical Equipment (Yerevan), Odessa State University imeni I. I. Mechnikov

"Chemical Sources of Hydrogen for Electrochemical Generators. II. Benzene-Cyclohexane System as a Hydrogen Accumulator; Hydrogenation of Benzene"

Yerevan, Armyanskiy Khimicheskiy Zhurnal, Vol XXIV, No 12, 1971, pp 1044-1049

Abstract: A study was made of the benzene-cyclohexane system as a hydrogen accumulator with the catalytic process of hydrogenation of benzene and dehydrogenation of cyclohexane in a single device (generator), changing only the process conditions (temperature and pressure). A study was made of the kinetics of hydrogenation under a pressure of 10 atmospheres in the temperature range of 230-250°. The optimal conditions of the processes were determined, and the possibility of realizing the hydrogenation and dehydrogenation processes with sufficient speed with a comparatively small amount of catalyst, minimum volume and weight of the device were determined. Under the given conditions the reaction is first order with respect to benzene and zero order with respect to hydrogen. The activation energy of the process was 11.6 kcal/mole.

Data are tabulated showing the degree of hydrogenation of benzene as a

DAVTYAN, O. K., et al., Armyanskiy Khimicheskiy Zhurnal, Vol XXIV, No 12, 1971, pp 1044-1049

function of the raw material feed rate at various temperatures and the rate constants of the benzene hydrogenation reaction for various feed rates of the raw materials and various temperatures. The hydrogenation of benzene is directly proportional to the benzene pressure and does not depend on the hydrogen concentration.

2/2

- 10 -

ZPC 20 TO THE PARTY OF THE PART

UDC 541.13:541.128

DAVITYAN, O. K., and MISYUK, E. G., Odessa State University Imeni I. I. Mechnikov

"The Machanism and the Kinetics of Current-Forming Processes in Electrochemical Burning of Gasses. XIII. Mechanism and Activation Energy of Hole Transitions in Semiconductor Oxides and Their Role in the Catalytic Oxidation Processes"

Moscow, Zhurnal Fizicheskoy Khimii, Vol 45, No 1, Jan 71, pp 55-60

Abstract: A mechanism of electroconductivity and of catalytic activity is proposed. The semiconducting and catalytic properties of solid solutions obtained from varying valence metal exides are related to the formation of hole complexes which include a labile exide ion bound to the hole. Hole transition occurs via the formation of a monovalent exide ion. The transition energy of the exide ion into the active state represents the activation energy of conductivity and the catalytic processes taking place on the surface of the energy of activation has been developed for theoretical calculation of the energy of activation for such processes. It has been shown that with increased concentration of lithium ion the activation energy should drop initially, to be followed by a trend towards a constant value.

1/1

Acc. Nr.

Abstracting Service:

CHEMICAL ABST. 5 Code

URooso

I 106517a Mechanism and kinetics of current-forming processes of the electrochemical combustion of gases. XI. Mechanisms of activation and operation of oxygen electrodes based on metallic nickel and alkali metal oxides. Misyuk, E. G.; Davt
Van. D.-K.; Odess. Gos. Univ. im. Mechanicova, Udessa. USSR.

2h. Fitz. Khim. 1970, 44(1), 127-31 (Russ). The activation of O electrodes with KOH was accomplished beginning from the KOH sharply. A solid soln. is formed at the surface. At high temps., there is penetration into the Ni crystal lattice, with destruction of the electrodes. The possibility of low-temp. (400°) activation by K was demonstrated, after preliminary activation by Li at 700-800°, with ion exchange between the Li ions of the superficial solid soln. and K ions of the nolten K hydroxide. The electrochem. activity increases in the sequence Li, Na, K, Cs. The electrochem. activity is proportional to the inverse value of the ionization potential.

REEL/FRAME

REEL/FRAME 19841995

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

UNCLASSIFIED PROCESSING DATE--020CT70 TITLE--MECHANISM AND KINETICS OF CURRENT GENERATING PROCESSES OF THE ELECTROCHEMICAL COMBUSTION OF GASES. XII. ELECTROCHEMICAL ACTIVITY AS AUTHOR-(03)-MISYUK, E.G., DAVTYAN, O.K., YAMPOLSKAYA, L.P.

COUNTRY OF INFO--USSR

SOURCE--ZH. FIZ. KHIM. 1970, 44(2), 468-71

DATE PUEL ISHED----70

SUBJECT AREAS-CHEMISTRY, ELECTRONICS AND ELECTRICAL ENGR.

TGPIC TAGS--ELECTROCHEMICAL COMBUSTION, PORDSITY, ELECTRODE DESIGN, SURFACE PROPERTY, ACTIVITY COEFFICIENT, LITHIUM, POTASSIUM

CONTROL MARKING--NO RESTRICTIONS

DUCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1987/0359

STEP NO--UR/0076/70/044/002/0468/0471

CIRC ACCESSION NO--APO104295

UNCLASSIFIED

UNCLASSIFIED PROCESSING DATE--020CT70
CIRC ACCESSION NO--APOL04295
ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. A STUDY OF THE PURDUS STRUCTURE
AND ELECTROCHEM. ACTIVITY OF NI ELECTRODES, WHICH HAD BEEN ACTIVATED BY
2 BRIEF TREATMENTS WITH HYDRATED OXIDES (OF LI AT 700, 800, AND
900DEGREES FOLLOWED BY THAT OF K AT 400DEGREES) SHOWED THAT AT A GIVEN
ACTIVATION TEMP. THE ELECTROCHEM. ACTIVITY WAS PROPORTIONAL TO THE
MAGNITUDE OF THE ACTIVE SURFACE. THE MAX. VALUE OF ACTIVE SURFACE WAS
VIRTUALLY IDENTICAL WITH THE MAX. DISTRIBUTION OF SURFACE PORES
ACCORDING TO THEIR RADII. TREATMENT AT 800DEGREES GAVE THE MAX.
ELECTROCHEM. ACTIVITY.

Electrochemistry

UDC 541.13

USSR

MISYJK, E. G., DAVTYAN, O. K., and YAMPOL'SKAYA, L. M., Cdessa State University imeni-I. Mechnikov, Odessa, Ministry of Higher and Secondary Specialized Education Ukrainian SSR

"Mechanism and Kinetics of Current-Forming Processes in the Electrochemical Combustion of Gases. XII. Relation Between the Electrochemical Activity and the Magnitude of the Active Surface of Electrodes Activated by the Introduction of Lithium and Potassium"

Moscow, Zhurnal Fizicheskoy Khimii, Vol 44, No 2, Feb 70, pp 468-471

Abstract: It was established in earlier work (Misyuk and Davtyan, Zh. Fiz. Khim. 44, 127, 1970) that electrodes activated with LiOH and then with KOII had an activity that varied with the temperature of activation. Experiments conducted in this instance showed that with increasing temperatures of activation with LiOH the maximum of distribution of the pore surface in relation to the pore radii was displaced towards smaller radii because Li20 penetrated more deeply into the metal lattice. For Ni electrodes activated with LiOH in the 700-900 range and then with KOH at 4000, the magnitude of the specific active surface of the electrodes passed through a maximum on activation with LiOH at 800°, while the electrochemical activity

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

MISYUK, E. G., et al., Zhurnal Fizicheskoy khimii, Vol 44, No 2, Feb 70, pp 468-471

decreased steadily with increasing temperatures of LiOH activation. This was due to the fact that the stability of surface active centers, as distinguished from that of intracrystalline centers, decreased with increasing temperatures, so that their number and the surface concentration of Li and K ions decreased as the temperature of activation increased from 700 to 900°.

2/2

o el del documenta di distribis di seccioni di d

UDC 542.91+547.466.3

DAVTYAN, S. M., PAPAYAN, G. L., ASRATYAN, S. N., Institute of Fine Organic Chemistry, Yevevan, Academy of Sciences Armenian SSR

"Derivatives of \(\forall \)-Aminobutyric Acid. I. Synthesis of Methyl Ethers of N-Substituted O-Phenylaminoacetic Acids and Products of Their Reduction"

Yerevan, Armyanskiy Khimicheskiy Zhurnal, Vol 23, No 3, 1970, pp 251-257

Abstract: Y -Aminobutyric acid and a number of its derivatives are very active biologically. To study the effect of substituents in the hydrocarbon chain and associated with the nitrogen atom, the authors synthesized compounds with a phenyl group in the Y-position and replaced of one or both hydrogen atoms in the amino group by various substituents Phenylacetic acid was brominated in the presence of red phosphorus. The resultant O-bromopheny-lacetic ester was condensed with amines. The esters of N-substituted O-phenylaminoacetic acids produced in this way (with the exception of the methyl ether of O-phenyl-phenylaminoacetic acid) are liquids which readily form crystallizable hydrochlorides. When methyl amine is interacted with the methyl ether of O-bromophenyl 1/2

JSSR

DAVTYAN, S. M., et al., Armyanskiy Khimicheskiy Zhurnal, Vol 23, No 3, 1970, pp 251-257

acetic acid, an amino acid amide is produced. Lithium alumino-hydride reduction of the esters gives the corresponding amino-ethanols (crystalline benzylaminoethanol). A-Dimethylamino-, B-piperidyl- and A-benzylamino derivatives are synthesized from these compounds. All alcohols form readily crystallizable hydrochlorides. The biological properties of hydrochlorides of esters of N-substituted A-phenylaminoacetic acids and the corresponding amino alcohols were tested on anesthesized cats. Various compounds raise blood pressure, increase respiration and intensify the adrenalin effect. The compounds were found to be ineffective in other biotests -- spasmolytic, anethetic, and peripheral M-choline-reactive structures.

2/2

1/3 021

UNCLASSIFIED

PROCESSING DATE--230CT70

TITLE--DERIVATIVES OF GAMMA AMINOBUTYRIC ACID. I. SYNTHESIS OF METHYL ESTERS OF N SUBSTITUTED ALPHA PHENYLAMINDACETIC ACIDS AND PRODUCTS OF AUTHOR-(03)-DAVTYAN, S.M., PAPAYAN, G.L., ASRATYAN, S.N.

COUNTRY OF INFO--USSR

SOURCE--ARM. KHIM. ZH. 1970, 23(4), 251-7

DATE PUBLISHED-----70

SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES

TOPIC TAGS--BUTYRIC ACID, AMINE, CHEMICAL SYNTHESIS, ESTER, PHARMACOLOGY, TEST METHOD

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1999/1814

STEP NO--UR/0426/70/023/004/0251/0257

CIRC ACCESSION NO--AP0123605

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

PROCESSING DATE--230CT70 UNCLASSIFIED 2/3 021 CIRC ACCESSION NO--AP0123605 ABSTRACT/EXTRACT--(U) GP-O- ABSTRACT. A SERIES OF TITLE ESTERS PHCHRCO SUB2 ME (I) AND ALCS. PHCHRCH SUB2 OH (II) WAS PREPD. AND PHARMACOL. TESTED. THUS, 14.6 G ET SUB2 NH WAS ADDED DROPWISE TO A MIXT. OF 22.9 G PHCHBRCO SUB2 ME, SMALL AMT. NAI, AND 100 ML C SUB6 H SUB5, AND THE MIXT. HEATED 2 DAYS TO GIVE 85.6PERCENT I (R EQUALS NET SUB2), B SUB3 123-9DEGREES, D PRIME20 1.0135, N PRIME20 SUBD 1.5040; HYDROCHLORIDE M. 153-4DEGREES. THE FOLLOWING I WERE PREPD. SIMILARLY IR, B.P. PER MM, O PRIMEZO, N PRIMEZO SUBD, PERCENT YIELD, AND HYDROCHLORIDE M.P. GIVEN): NHME, 132-4DEGREES-2, 1.0718, 1.5152, 43, 114-15DEGREES; NHET, 128-30DEGREES-2, 1.0544, 1.5119, 59, 198-9DEGREES; NME SUB2, 122-4DEGREES-1, 1.0439, 1.5108, 80, 202-3DEGREES; 1,PYRROLIDINYL, 183-4DEGREES-4, 1.0743, 1.5220, 73, 182-3DEGREES; PIPERIDINO. 153-5DEGREES-7. 1.0674, 1.5279, 94, 184-5DEGREES: MORPHOLING, 150-3DEGREES-4, 1.1099, 1.5310, 80, 199-200DEGREES; NHPH, MINUS (M. 72-3DEGREEST, MINUS, MINUS, 57, 182-3DEGREES; NHCH SUB2 PH, 208-12DEGREES-5, 1.0990, 1.5630, 70, 178-9DEGREES.

INCLASSIFIED

3/3 021 UNCLASSIFIED CIRC ACCESSION NO--APO123605 PROCESSING DATE--230CT70 ABSTRACT/EXTRACT--LIALH SUB4 REDN. OF I GAVE THE FOLLOWING II (R. B.P.-MM, D PRIMEZO, M PRIMEZO SUBD, PERCENT YIELD, AND HYDROCHLORIDE M.P. GIVEN): NET SUB2, 137-40DEGREES-5, 1.0394, 1.5381, 90, 135-60EGREES; NHME, 115-20DEGREES-4, 1.0193, 1.5319, 65, MINUS; NHET, 125-30D GREES-2, 1.0062, 1.5236, 76, 139-40DEGREES; NME SUB2, 130-5DEGREES-2, 1.0394, 1.5381, 85, 113-14DEGREES; 1, PYRROLIDINYL, 170-4DEGREES-7, 1.0681. 1.5502, 89, 186-7DEGREES; PIPERIDINO, 163-6DEGREES-5, 1.0556, 1.5486, 90, 153-4DEGREES; MORPHOLINO, 163-4DEGREES-2, 1.1061, 1.5.86, 88, 158-9DEGREES; NHPH, 209-10DEGREES-4, MINUS, MINUS, 80, 143-4DEGREES; NHCH SUB2 PH, 213-15DEGREES-7 (M. 69-70DEGREES), MINUS, MINUS, 82, 229-300EGREES. A SOLN. OF 50 G PHCHBRCO SUB2 ME AND A SMALL AMT. OF NAI IN C SUB6 H SUB6 SATD. WITH MENH SUB2 AND HEATED AT 120 DEGREES IN AN AUTUCLAE FOR 4 DAYS GAVE 52 PERCENT PHCH (NHME) CONHME, 8 SUB5 185-9DEGREES, M. 83-4DEGREES. FACILITY: INST. TONKOL ORG. KHIM., EREVAN, USSR.

UNCLASSIFIED

USSR

0

UDC 621.394/.395:621.317

AUGUST, G. I., DAVUDOV, S. A., SEKNIN, V. G.

"Automatic Machine for Matrix Tests by a Statistical Method with Complex Analyzing Devices for Units of Communication Apparatus"

V sb. Metody razrab. radioelektron. apparatury, No 1 (Methods for Development of Radioelectronic Apparatus, No 1 -- Collection of Works), Moscow, 1970, pp 142-145 (from RZh--Elektrosvyaz', No 9, September 1970, Abstract No 9.64.17)

Translation: The paper reports on the development of an automatic machine for matrix tests by statistical methods, which is intended for the solution of a number of problems on the reliability of apparatus for long-distance service. A block diagram of the automatic machine and the analyzing devices is presented, a classification is given of the analyzing devices, and a list of the controlled parameters of analogous apparatus: individual equipment, grouped channel, generating equipment, power supply units and units of the pulse code modulation [IKM] system (parameters of pulses). Three illustrations. D. B.

1/1

- 42 -

UNCLASSIFIED PROCESSING DATE--11SEP70
TITLE--MINERAL FORMATION IN KIMBERLITES AT THE EXPERIMENTAL CONDITIONS OF

HIGH PRESSURES AND TEMPERATURES -U-AUTHOR-DAVYDCHENKO, A.G., LISITSYNA, YE.YE., BEZRUKOV, G.N., GOROKHOV,

S.S. COUNTRY OF INFO--USSR

SOURCE-GEOLOGIYA I GEOFIZIKA, 1970, NR 1 (121), PP 129-135

DATE PUBLISHED ---- 70

SUBJECT AREAS--EARTH SCIENCES AND OCEANOGRAPHY

TOPIC TAGS--MINERAL FORMATION ANALYSIS, HIGH TEMPERATURE, HIGH PRESSURE

SONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1987/0880

STEP NO--UR/0210/70/000/001/0129/0135

CIRC ACCESSION NO--APO104316

UNCLASSIFIED

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3"

CIRC ACCESSION NO--APO104316

ABSTRACT/EXTRACT--(U) GP-O- ABSTRACT. KIMBERLITE FROM THE MIR PIPE WAS UNDERGONE BY THE FEFECT OF HIGH TEMPERATURES (UP TO 1400-15000EGREESC) AT THE PRESSURE 10 AND 25 KBAR IN THE WATER PRESSURE. THE FORSTERITE, TEMPERATURES BELOW THE MELTING TEMPERATURE, AT 25 KBAR PRESSURE PYROPE FORSTERITE AND GLASS FORMATION. BY THE LOCATION OF FURNOFILLITE INTO REACTIONAL CAMERA AT THE PRESSURE OF 25 KBAR AND TEMPERATURE ABOVE GARNET TAKES PLACE, THE GARNET IS CLOSE TO PYROPE IN COMPOSITION.

UNCLASSIFIED

ANO009838_

"AUTHOR --

DAVYDCHENKOY V.

TITLE--

A COUNCIL OF PRESIDENTS

UR 9003

2,

NEWSPAPER-- IZVESTIYA, JANUARY 6, 1970, P 3, COLS 4-6

ABSTRACT-- SIXTEEN INSTITUTIONS OF HIGHER LEARNING OF NOVOSIBIRSK ARE ADMINISTERED BY 7 MINISTERS. THE CITY ALSO HAS A ZONAL COUNCIL OF INSTITUTIONS OF HIGHER LEARNING. THE COUNCIL SUPPOSEDLY CO-ORDINATES THE RESEARCH AND EDUCATIONAL EFFORTS OF THE CITY HIGHER SCHOOLS. IN PRACTICE, HOWEVER, ITS MEMBERS ARE ONLY THE INSTITUTES WHICH ARE ADMINISTERED BY THE MINISTRY OF HIGHER AND MIDDLE SPECIALIZED EDUCATION. TO REMEDY THE SITUATION, A COUNCIL OF SCHOOL PRESIDENTS HAS BEEN ESTABLISHED. ON THIS COUNCIL ARE PRESIDENTS OF NOVOSIBIRSK HIGHER SCHOOLS, REGARDLESS OF THEIR MINISTRIES. THE IMMEDIATE CONCERN OF THE NEW COUNCIL IS THE CLOSER TIES BETWEEN SCIENCE AND INDUSTRY.

IT IS ALSO REVEALED THAT THE INSTITUTES OF NOVOSIBIRSK DO 20-25 MILLION RUBLES WORTH OF RESEARCH ANNUALLY, WITH THE PARTICIPATION OF THOUSANDS OF STUDENTS AND INSTRUCTORS.

1/1

19560271

MK

30

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP

CIA-RDP86-00513R002200620006-3

1/5 020 TITLE--EDUCATION -U-

UNCLASSIFIED

PROCESSING DATE--230CT70

AUTHOR-DAVYDCHENKOV, V.

COUNTRY OF INFO--USSR

SUURCE--IZVESTIA, JAN. 6, P. 3

DATE PUBLISHED--06JAN70

SUBJECT AREAS--BEHAVIORAL AND SOCIAL SCIENCES

TOPIC TAGS--EDUCATIONAL POLICY, ACADEMIC INSTITUTION ADMINISTRATION, R AND D COUPERATION, ACADEMY OF SCIENCE R AND D, HIGHER EDUCATION INSTITUTE R AND D, HEAD INSTITUTE, MINISTERIAL CONTROL, S AND T PUBLICATION PROBLEM, R AND D MANAGEMENT PROBLEM, CONTRACT R AND D MANAGEMENT, ADVANCED ACADEMIC INSTITUTION

CONTROL MARKING--NO RESTRICTIONS

DOCUMENT CLASS--UNCLASSIFIED PROXY REEL/FRAME--1996/1227

STEP NU--UR/9003/70/000/000/0003/0003

CIRC ACCESSION NO--ANOLI8287

UNCLASSIFIED

2/5 020 UNCLASSIFIED PROCESSING DATE--230CT70
CIRCTACCESSION NO--ANOL18287

- 14- Problem Basemann and Amerikania

ABSTRACT/EXTRACT--(U) GP-O- ABSTRACT. THEY THOUGHT A LONG TIME IN NOVOSIBIRSK BEFORE FOUNDING A NEW PUBLIC INSTITUTION A COUNCIL OF REACTORS. SOME SAID: "WE NEED IT". OTHERS: "AND WHAT WILL THE COUNCIL DO"? STILL OTHERS: "WE ALREADY HAVE A REGIONAL COUNCIL OF HIGHER EDUCATIONAL INSTITUTIONS; WHY ANOTHER LEVEL"? THE REGIONAL COUNCIL HAS BEEN AT WORK FOR MANY YEARS; BUT IT COMPRISES ONLY INSTITUTES UNDER THE MINISTRY OF HIGHER AND SPECIALIZED SECONDARY EDUCATION. YET THERE ARE 16 HIGHER EDUCATIONAL INSTITUTIONS IN THE CITY THAT ARE SUBORDINATE TO SIX MINISTRIES. THE PROBLEMS OF HIGHER EDUCATIONAL INSTITUTIONS ARE COMMON TO ALL CALTHOUGH THE MINISTRIES ARE DIVERSE), AND LOCATED IN ONE CITY THEY DUGHT TO CONSTITUTE A SINGLE ORGANISM. IN REALITY, CONFUSION, VARYING POTENTIAL AND DIFFERENT LEVELS OF TEACHING AND EQUIPMENT, EXIST. THE IDEA ITSELF OF CREATING THE COUNCIL, THE RANGE OF ITS INTERESTS AND ITS STATUTE WERE DISCUSSED BEFOREHAND BY A NUMBER OF KNOWLEDGEABLE PERSONS. AND THE ASSIDUOUS PREPARATION MADE IT POSSIBLE, BEGINNING WITH THE ORGANIZATIONAL MEETING, TO AVOID WASTEFUL FUSSING. THE MINUTES OF THE SESSIONS ARE DRY AND BUSINESSLIKE. "IT IS NECESSARY TO ESTABLISH COOPERATION BETWEEN THE CITY'S HIGHER EDUCATIONAL INSTITUTIONS AND THE U.S.S.R. ACADEMY OF SCIENCES "SIBERIAN DIVISION" SUCH IS A NOTATION IN ONE OF THE FIRST IT IS QUITE RECENT, FEBRUARY, 1968. TODAY, AFTER VISITING THE CITY'S HIGHER EDUCATIONAL INSTITUTIONS, I HAVE NOT FOUND ONE THAT IS WITHOUT RELATIONSHIP TO THE SCIENCE CITY. THERE ARE PLENTY OF FRUITFUL, MUTUALLY ADVANTAGEOUS CONTACTS: THEY CAN'T BE COUNTED.

UNCLASSIFIED

3/5 020 UNCLASSIFIED PROCESSING DATE--230CT70 CIRC ACCESSION NO--ANOI18287 ABSTRACT/EXTRACT--LET US NOTE ONLY THAT THE SCIENTISTS AT THE SIBERIAN DIVISION FREELY OPEN THE DOORS OF THEIR LABORATORIES TO COLLABORATION, BRINGING HIGH SCIENCE INTO STUDENT LECTURE HALLS. . NATURALLY, A DISTINCT IMPROVEMENT IN EDUCATION TAKES A LONG TIME. IT IS IMPORTANT TO EMPHASIZE THAT THE COUNCIL OF RECTORS HAS MADE THE FIRST REAL STEPS IN THIS DIRECTION. THEY BEGAN, IT WOULD APPEAR, WITH SOMETHING SIMPLE: THE REGULAR EXCHANGE OF WRITINGS PUBLISHED BY EACH INSTITUTE. THE NEXT STAGE WAS TO OFFER VALUABLE LABORATORY APPARATUS FOR THE JOB TRAINING OF UPPERCLASSMEN, GRADUATE STUDENTS AND INSTRUCTORS. THIS MEASURE ALONE MADE POSSIBLE AN ACTUAL DOUBLING OF THE NUMBER OF LABORATORY POSTS. WITHIN EACH DISCIPLINE, A HEAD HIGHER EDUCATIONAL INSTITUTION WAS DESIGNATED; THESE ARE THE CENTERS OF THE MOST EXPERIENCED INSTRUCTORS, RELATED DEPARTMENTS ARE PERMITTED TO AID EACH OTHER (THE MATHEMATICIANS ARE BEST IN ONE INSTITUTE; THEY CONDUCT THE OFFICIAL COURSE FOR NEIGHBORING INSTITUTES: ANOTHER HAS THE BEST CHEMISTS, ETC). THE MAP OF NOVOSIBIRSK PROVINCE THAT WAS RECENTLY EXAMINED BY THE IT IS DIVIDED INTO SEVEN ZONES. THERE TURN OUT TO BE 2,000 FULL AND PART TIME UNDERCLASSMEN IN THE PROVINCE. THEY ARE RESIDENTS OF 40 POPULATION CENTERS. EACH INSTITUTE CONDUCTS CLASSES AND CONFERENCES FOR THEM. THIS IS SENSELESS AND HIGHLY EXPENSIVE PARALLELISM. HIGHER EDUCATIONAL INSTITUTIONS CANNTO BRAG ABOUT QUALITY. OF RECTORS DELVED DEEPLY INTO THE PROBLEM AND CONCLUDED THAT MANY THE COUNCIL DISCIPLINES ARE PRACTICALLY INDISTINGUISHABLE FROM ONE ANOTHER AT THE BEGINNING LEVELS.

UNCLASSIFIED

4/5 020 UNCLASSIFIED PROCESSING DATE--230CT70 CIRC ACCESSION NO--ANOII8287 ABSTRACT/EXTRACT--IT WAS PROPOSED THAT LARGE SCIENTIFIC CONFERENCE CENTERS BE ESTABLISHED, EACH OF WHICH WOULD BE ATTACHED TO ONE INSTITUTE. PROPOSED CHANGES ARE QUITE ESSENTIAL, ESPECIALLY IN THAT NOT ALL MINISTRIES ARE IN FULL AGREEMENT WITH THEM AND SEVERAL ARE VACILLATING. A DEFINITIVE VARIANT IS SOON TO BE WORKED OUT. THE FACT THAT THE COUNCIL IS KEEPING IN MIND THE INTERESTS OF ALL INSTITUTES, REGARDLESS OF THEIR DEPARTMENTAL AFFILIATION, IS APPARENT AND TO BE WELCOMED. COUNCIL OF RECTORS HAS NOT YET ARRIVED AT A SINGLE VIEW ON WHETHER TO OCCUPY ITSELF WITH THIS ASPECT OF THE LIFE OF HIGHER EDUCATIONAL INSTITUTIONS HOUSING, POLYCLINICS, RECREATION CENTERS. IT WOULD SEEM THAT THIS MIGHT BE REALIZED MORE SIMPLY AND EASILY BY JOINT EFFORTS. HOWEVER, CAPITAL INVESTMENTS MOVE THROUGH THE CHANNELS, SO TO SPEAK, OF VARIOUS MINISTIES, AND IT IS DIFFICULT OF POOL THEM. I AM NOT INCLINED TO GLOSS OVER THE DIFFICULTIES. THEY DERIVE FROM THE PECULIARITIES OF HIGHER SCHOOL LIFE. SOME HIGHER EDUCATIONAL INSTITUTIONS ANVE MORE RESOURCES FOR DEVELOPMENT, OTHERS LESS. NOT ALL THE "WEALTHY" WISH TO COOPERATE WITH THE "POOR". THE NOVOSIBIRSK ELECTRICAL EQUIPMENT INSTITUTE'S PRINTING FACILITY, LET US SAY, CAN WITHIN A FEW HOURS AFTER GOING TO PRESS PRINT A FINISHED BOOK CONSISTING OF TWO OR THREE SIGNATURES. OTHER HIGHER EDUCATIONAL INSTITUTIONS, HOWEVER, WOULD WASTE MONTHS AND YEARS ON THE SAME MANUSCRIPT. AND, AS LONG AS THE COUNCIL ADOPTS RECOMMENDATIONS ONLY UNANIMOUSLY, NO SOLUTION TO SUCH PROBLEMS WILL BE FOUND. THE INSTITUTES OF NOVOSIBIRSK ANNUALLY FULFILL 20,000,000 TO 25,000,000 RUBLES! WORTH OF ECONOMIC CONTRACT WORK.

UNCLASSIFIED

USSR

UDC 771.553:771.537.61

GAVRIK, V. V., GOROKHOVSKIY, Yu. N., and DAVYDKIN, I. M.

"Analytic Expression of the Frequency-Contrast Function of Photographic Materials"

Moscow, Zhurnal Nauchnoy i Prikladnoy Fotografii i Kinematografii, Vol 17, No 3 1972, pp 190-197

Abstract: On the basis of the study of a large volume of experimental results by the method of principal components, it was established that the frequencycontrast functions of black and white photographic materials can be described, with a mean-square error of less than 0.01, by the expansion T = a + b (e^{-knu}), where T is the coefficient of contrast transfer, while nu is the space frequency in mm⁻¹. It is shown that the basic differences of frequency-contrast functions are caused predominantly by changes of a parameter of this expression, namely K, which apparently characterizes the light-dispersion characteristics in the emulsion layer. Of the two other parameters, b apparently accounts for the influence of reflex halation. Possible causes of appearance of the variable parameter a are discussed. For a single-parameter description of the frequency-contrast function with a mean square error of about 2 $\,\mathrm{mm}^{-1}$ within the interval of values of the contrast transfer coefficient from 0.2 to 0.9, the function $nu \approx -K \lg(0.88 T - 0.062)$ is proposed. 2 tables, 3 figures, 23 references. 1/1

USSR

UDC 621.372.832.8

SIMANCHUK, B. P. and DAVYDENKO, G. O.

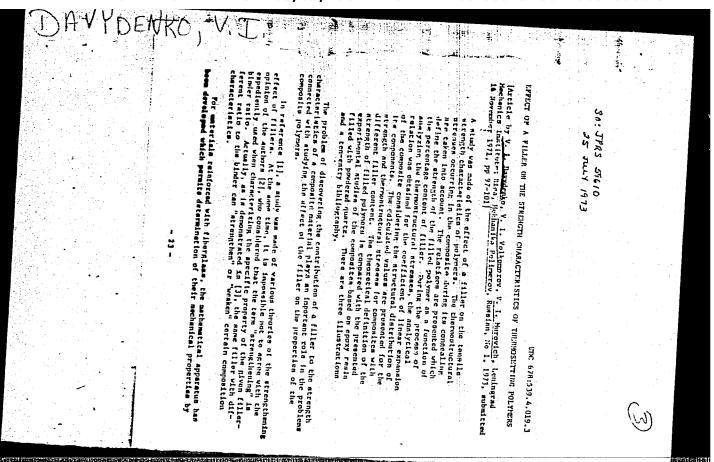
"Development of a Series of Ferrite Super-High Frequency Units Based on Nonsymmetric Strip Line"

Tr. Nosk. in-ta radiotekhn., elektron. i avtomatiki (Works of the Moscow Institute of Radio Engineering, Electronics and Automation), 1972, vyp.55, pp 184-188 (from RZh-Radiotekhnika, No 11, Nov 72, Abstract No 11 B152)

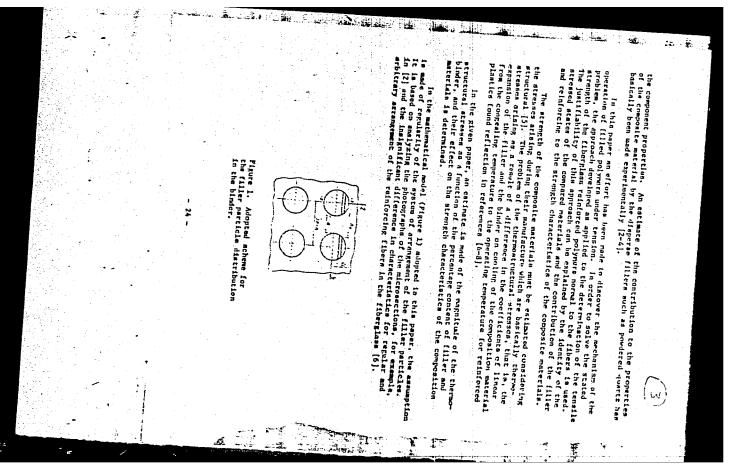
Translation: A series of units (Y-circulators, 4 and 5 arm circulators) is described based on a bridge type, strip circulator operating in the preresonance region. The bases for the calculations are given. The parameters are also given. Original article: one illustrations, one table, and three bibliographic entries. N.S.

1/1

- 140 -



"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3



USSR

UDD 621.378.329

BORISOV, N.A., DAVYDOV, A.A., LAVRUSHIN, B.M., MARKOV, YE.V.

"On The Effect Of Cavity Mechanical Trestment On The Parameters Of A Cadmium Sulphide Laser With Electron Excitation"

Kventovaya elektronika (Quantum Electronics), Moscow, No 6(12),1972, pp 115-116

Abstract: The paper studies the laser parameters of bulk single crystals of cadmium sulphide grown by the static sublimation method. The results obtained in the work show that to a considerable degree the low laser parameters realized heretofore with bulk crystals of OdS are caused by mechanical processing of the surface bombarded by electrons. In the case of excitation through the classed surface, the values obtained of the laser threshold of generation and efficiency are close to the best results obtained with plate crystals of OdS. 6 ref. Received by editors, 22 May 1972.

1/1

- 76 -

USSR

DAVYDOV. A. A., KULEVSKIY, L. A., PROKHOROV, A. M., SAVEL'YEV, A. D., and SMIRNOV, V. V., Physics Institute imeni P. N. Lebedev, Academy of Sciences USSR

"Farametric Oscillation of a CdSe Crystal With Pumping From a CaF2:Dy2+

Moscow, Pis'ma v Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, Vol 15, No 12, 20 Jun 72, pp 725-727

Abstract: The authors report obtaining parametric oscillation for the first time of a CdSe semiconductor crystal. The parametric radiation wavelengths were 3.37 and 7.86 microns. The pumping source used was a Q-switched CaF2: Dy²⁺ crystal laser with a laser wavelength of 2.36 microns and a repetition rate of 1 Hz. The resonator of the parametric oscillator was formed by two plane-parallel dielectric mirrors applied to fluorite substrates. The authors thank YU. N. POLIVANOV for useful discussions.

1/1

-_26

USSR

UDC 621.791.039

ISHTYKOV, YU. V., Engineer, KOSTENKO, I. F., Engineer, STEPANOV, N. A., Technician, DAVYDOV, A. A., Technician

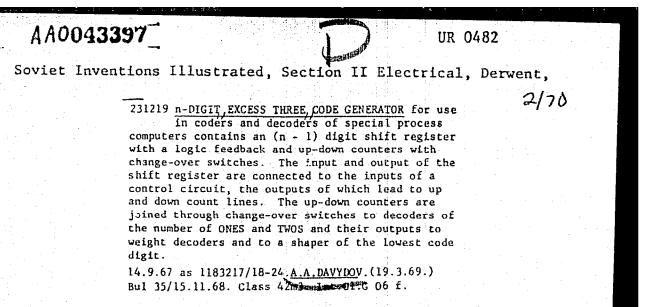
"Protective Chamber for Welding Circular Seams on Curvilinear Surfaces"

Moscow, Svarochnoye Proizvodstvo, No 3, Mar 72, p 43

Abstract: A protective telescopic chamber for welding circular seams on stationary objects is described. The chamber has passed prolonged tests and provides reliable protection in automatic welding circular seams, 50-200 mm in diameter, on objects of OT4 and VT20 steels with curvilinear surfaces. The chamber is equipped with two movable telescopically connected cylinders of diameters greater than the diameter of the seam to be welded. Stationary objects can be welded with this chamber by rotating the upper cylinder and welding head; rotating objects are welded by a stationary upper cylinder and torch. The use of the chamber for welding in an argon atmosphere with nonconsumable electrodes has proved to be economical and to provide high-quality circular welds on curved surfaces. 1 illustration

"APPROVED FOR RELEASE: 08/09/2001

CIA-RDP86-00513R002200620006-3

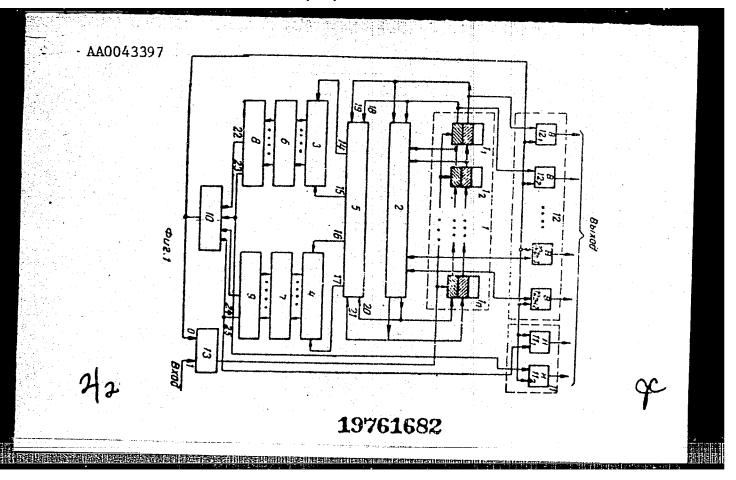


112

19761681

raasel kaesikissestekseerikaan sellikaan kantaan kantaan kantaan kantaan kantaan kantaan kantaan kantaan kanta Kansa kaesel keesel kantaan ka

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R002200620006-3



1/2 007 UNCLASSIFIED PROCESSING DATE--300CT70
TITLE--ON CERTAIN METHOD OF CONSTRUCTING GENERATUR OF PERMUTATIONS -U-

AUTHOR-DAVYDOV, A.A.

COUNTRY OF INFO-USSR

SOURCE--AVTOMATIKA I TELEMEKHANIKA, 1970. NR 6, PP 134-143

DATE PUBLISHED -----70

SUBJECT AREAS -- MATHEMATICAL SCIENCES

TUPIC TAGS-ALGERITHM, PERMUTATION, SEQUENCE

CONTROL MARKING--NO RESTRICTIONS

DGCUMENT CLASS--UNCLASSIFIED PRUXY REEL/FRAME-2000/1208

STEP NG--UR/0103/70/000/006/0134/0143

CIRC ACCESSION NO--APO124862

UNCLASSIFIED

UNCLASSIFIED

PROCESSING DATE--300CT70

CIRC ACCESSION NO--APO124862

ABSTRACT/EXTRACT--(U) GP-0OF THE FUNCTIONING AND THE STRUCTURE OF A DEVICE GENERATING ALL THE ELEMENTS OF AN ENSEMBLE OF N ORDER K NARY SEQUENCES EACH OF WHICH EQUAL TO 2). THE ESTIMATION OF THE GENERATOR QUICK RESPONSE IS MADE.

UNCLASSIFIED

UNCLASSIFIED

USSR

UDC: 537.29:669.01

DAVYDOV, A. D., KASHCHEYEV, V. D., MIRZOYEV, R. A., Moscow

"Anodic Dissolution of Iron- and Nickel-Based Alloys in the Process of Electrochemical Dimensional Working in Sodium Chloride Solutions"

Moscow, Fizika i Khimiya Obrabotki Materialov [The Physics and Chemistry of Materials Processing], No 6, Nov-Dec 73, pp 32-36.

Abstract: Anodic polarization curves are produced for a number of alloys based on iron and nickel in sodium chloride solutions up to current densities of 50a/cm2 The electrode potentials in the current density interval studied do not exceed + 3.2 v. The heat treatment mode of the alloys may have a significant influence on their anodic behavior. The anodic dissolution of iron- and nickelbased alloys in sodium chloride solutions may vary in nature as a function of electrode potential. Accordingly, the polarization curve generally has several sections. The local value of potential on the surface of the part being worked depends significantly on the hydrodynamic conditions in the interelectrode gap. Upon transition from activated dissolution of the electrode to dissolution in the state of transpassivation, the external

1/2

- 79 -

USSR

Davydov, A. D., Kashcheyev, V. D., Mirzoyev, R. A., Moscow, Fizika i Khimiya Obrabotki Materialov, No 6, Nov-Dec 73, pp 32-36.

appearance and smoothness of the anode surface change and the yield per current may drop. Anodic dissolution of alloys in the transpassive state may occur quite rapidly.

2/2

USSR

UDC: 669.71.053.21

LEONT'YEV, L. I., MATYASH, V. G., DAVYDOV, A. D., KASHIN, V. V., UTKOV,

"Reducibility of Highly Basic Bauxite Sinters"

Vosstanovimost' Vysokoosnovnykh Boksitovykh Aglomeratov [English version above], Sverdlovsk, 1973, 9 pp (Translated from Referativnyy Zhurnal Metallurgiya, No 8, 1973, Abstract No 8G155DEP, by the authors).

Translation: The extraction of moist limestone from blast furnace charges significantly improves the technical and economic indicators of the blast furnace process. The possibility is demonstrated of producing a bauxite sinter with basicity 6.0, allowing complete elimination of limestone in the process of blast furnace melting of bauxites, in order to produce a slag which can be used for the production of Al₂O₃. The peculiarities of the reduction of the sinter of various compositions under equilibrium and kinetic conditions are studied. Reduction of bauxite sinter with basicity 1.3-6.0 under kinetic and equilibrium conditions has shown that as the basicity increases, reducibility improves. This agrees with the nature of the change of phase composition of sinters: as basicity increases, the content of difficultly reducible

USSR

Leont'yev, L. I., Matyash, V. G., Davydov, A. D., Kashin, V. V. Utkov, V. A., Ivanova, S. V., Vosstanovimost' Vysokoosnovnykh Boksitovykh Aglomeratov,

hercynite decreases, while the share of more easily reducible ferrites and aluminoferrites of Ca increases.

2/2

- 90 -

USSR

UDC: 669.71.046.44

UTKOV, V. A., DAVYDOV, A. D., KASHIN, V. V.

"Strength of Highly Basic Bauxite Sinter"

Prochnost' Vysokoosnovnogo Boksitovogo Aglomerata [English version above], Sverdlovsk, 1973, 14 pp (Translated from Referativnyy Zhurnal Metallurgiya, No 8, 1973, Abstract No 8G152DEP, by the authors).

Translation: The mechanical properties of sinters of various basicities produced from bauxite with grain sizes 0-10 mm are studied. The minimum of strength with basicity 1.7-1.8, characteristic for ordinary iron ore sinter, is not discovered in bauxite sinter. The strength properties are rather high throughout the entire range of basicity studied, from 1 to 6. As phase analysis shows, there is practically no bicalcium silicate in the bauxite sinters. Bauxite sinters are very slightly damaged during heating and reduction. The influence of storage conditions on the strength of highly basic bauxite sinter is studied.

1/1

USSR

UDC: 620.193.01:669.725

DAVYDOV, A. D., KASHCHEYEV, V. D., KOZLOV, M. V.

"Influence of Anions in Electrolyte on Anodic Dissolution of Beryllium"

Moscow, Zashchita Metallov, Vol 9, No 4, Jul-Aug 73, p 436.

Translation: The authors produced anodic potentiodynamic (2 v/min) polarization curves on a rotating (5000 rpm) beryllium disc electrode. After the potential corresponding to the anion present is reached, the rate of dissolution of the metal increases rapidly. In hydrochloric and particularly sulfuric acid, anodic dissolution of beryllium begins at less positive potentials than in the corresponding salts, apparently a result of the dissolution of the oxide film. The yield per current with anodic dissolution of beryllium also depends on the nature of the anions present in the electrolyte and generally exceeds 100% as Be²⁺.

1/1

- 19 -